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ABSTRACT

A program to improve sixth through eighth grade underachieving students' reading comprehension was developed. Students were identified by comparing their anticipated and actual national percentile scores on the Test of Cognitive Skills (TCS) and the Comprehensive Test of Basic Skills (CTBS). A survey of students' reading behavior, a review of school library circulation statistics, and the administration of the Estes Scale of Reading Attitudes revealed reading was not a priority interest for upper elementary grade students at Franklin Elementary School (serving grades K-8) in Franklin, New Jersey. The major solution strategies employed to improve achievement were designed to also increase positive attitudes toward reading. Strategies included the implementation of silent sustained reading, Accelerated Reader, a campaign for public library membership, a home reading contract, a read-aloud program, and a novel-based approach to reading instruction. As a result of the interventions, 82% of the 46 underachievers who completed the project improved their reading comprehension achievement on the CTBS and 52% met their original anticipated achievement as predicted by the TCS. Although the underachievers showed a mean increase of 8.36 normal curve equivalent points on the CTBS reading comprehension subtest, only eighth graders demonstrated a mean increase in positive attitude toward reading. Increased reading activity had a positive relation with improved reading comprehension; however, no clear association involving reading attitude and the interventions emerged. (Includes 22 tables of data. Appendixes present district goals in reading, data, survey instruments, the student-parent-teacher reading contract, and a read-aloud response form. Contains 34 references.) (Author/RS)

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ED 372 374

Improving Reading Comprehension Achievement of Sixth, Seventh, and Eighth Grade Underachievers

by

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A Major Applied Research Project Report
presented in partial fulfillment of the requirements
for the degree of Doctor of Education

National Ed.D. Program for Educational Leaders
Nova University

August 1993

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Abstract

Improving Reading Comprehension Achievement of Sixth, Seventh, and Eighth Grade Underachievers

This report describes the process to improve reading comprehension for sixth through eighth grade underachievers. These students were identified by comparing their anticipated and actual national percentile scores on the Test of Cognitive Skills (TCS) and the Comprehensive Test of Basic Skills (CTBS). A survey of students' reading behavior, a review of school library circulation statistics, and the administration of the Estes Scale of Reading Attitudes revealed reading was not a priority interest for upper elementary grade students.

Analysis of problem symptoms, supported by the literature review, suggested the problem of underachievement, especially related to reading comprehension, had several points of impact: (a) the value of reading frequently, (b) student attitude, (c) the importance of role-modeling and providing opportunities to read, (d) the influence of family background, and (e) the significance of motivation and incentives for reading.

The major solution strategies employed to improve achievement were designed to also increase positive attitudes toward reading. These strategies included the implementation of silent sustained reading, Accelerated Reader, a campaign for public library membership, a home reading contract, a read-aloud program, and a novel-based approach to reading instruction.

As a result of the interventions, 82% of the 46 underachievers who completed the project improved their reading comprehension achievement on the CTBS and 52% actually met their original anticipated achievement as predicted on the TCS. Although the sixth through eighth grade underachievers showed a mean increase of 8.36 normal curve equivalent (NCE) points on the CTBS reading comprehension subtest, only eighth graders demonstrated a mean increase in positive attitude toward reading on the Estes Survey. It was evident increased reading activity has a positive relation with improved reading comprehension; however, there was no clear association involving reading attitude and the interventions employed.

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Chapter I

Problem Statement and Community Background

General Statement of Problem

An analysis of standardized test scores showed 54 of the 142 regular education students (38%) in Grades Five, Six, and Seven were achieving below their anticipated ability in reading comprehension in the 1990-1991 school year. This ratio represented a substantial number of students who were underachieving, yet were not classified as needing special education services.

The Immediate Problem Context

Franklin School District consists of a large single building, Franklin Elementary School, serving, in 1991-1992, more than 600 children in pre-school through eighth grade. During that year, the school's organization consisted of a superintendent, business administrator/board secretary, principal, vice principal, guidance counselor, 26 regular classroom teachers, 11 special education teachers, 5 basic skills teachers, 8 special area teachers, 2 speech teachers, a librarian, a nurse, and a child study team including a school social worker, psychologist, and learning disabilities teacher/consultant. Eleven support staff members assisted in the transitional first grade and special education classrooms, the library, the nurse's office and cafeteria. Additional support staff included seven secretaries and clerks, as well as seven maintenance and custodial crew members.

The manager for this project was the superintendent of Franklin School District. The superintendent has ultimate responsibility for the total program, including all personnel, financial, and curriculum decisions. The superintendent is responsible to the nine-member elected school board and, as superintendent, sits on the board as an ex officio non-voting member. Given the duties of the superintendent in terms of this problem context, his responsibilities are to improve instruction, improve student performance, direct resources--both human and financial--toward that improvement, and report the results to the board of education and the state. In carrying out these tasks, the superintendent may delegate various responsibilities to line and support staff and must comply with constitutional and state laws and board regulations. Franklin School District is organized as a unit-control entity, requiring a direct line of all staff through the superintendent or his subordinates to the board of education. In this project, the superintendent took an active role in the identification of students, identification of problem strategies and solutions, and identification of resources. He delegated to the principal and guidance counselor, attempting to maintain appropriate protocol. However, given the personal investment in this project, he also actively participated with the reading committee, home and school association, teachers, and students involved in this effort.

The Surrounding Community

Franklin Borough is located in Sussex County, New Jersey, approximately 40 miles northwest of New York City. Franklin is a small community (4.4 square miles) with a population of 4,486 in 1990. Because of the borough's proximity to the New York metropolitan area, considerable growth and inflated property values have occurred since the early 1980s. Paradoxically, Franklin experienced an economic depression after its world-famous zinc mine closed in 1954 and, in the 1990s, the town is still recovering from the mine's closing. Further, with the increased property values and a high property tax rate of $4.35 per $100 of assessed valuation, the tax effect was considerable. The elementary school tax portion was substantial at 41%, or $1.76 per $100 of assessed valuation. This amount excluded the regional high school tax portion. The higher property assessments, coupled with the tax rate, have caused school budget defeats in 7 of the past 12 budgets beginning in 1979.

Franklin Elementary School has identified a substantial number of students as having special learning needs. The special education population included 125 students, or 20% of the student body in 1991-1992. Students classified as special education pupils were not considered for this project.

Also noteworthy is the number of students attending Franklin Elementary School who qualify for free- and/or reduced-price lunch/milk. Approximately 17% of the students so qualified in 1991-1992. Although New Jersey identifies its at-risk students through the free lunch count, this particular project transcended this definition of the at-risk student. Indeed, for this project, any student entering sixth, seventh, and eighth grade who scored below his/her predicted reading comprehension was identified for intervention.

Finally, Franklin is nestled near the Kittatinny Mountains, giving this community an abundance of natural beauty. It was the manager's hope that this project would enable students to find equal beauty in their travels through literature in an attempt to increase their reading comprehension. The residents of Franklin and the children who attend Franklin Elementary School represent diverse socioeconomic backgrounds. Some students attending Franklin in 1991-1992 lived in homeless shelters, a trailer park, rental apartments, condominiums, or single-family housing ranging from well under $50,000 to more than $350,000. The student body was 98% white and English speaking. During the school years 1990-1992, only four non-English speaking students attended Franklin, including speakers of the following languages: Hungarian, Spanish, and Italian.

Chapter 2

Problem Definition and Evidence

Problem Background

In April 1991, 142 students in Grades Five, Six, and Seven completed the Comprehensive Test of Basic Skills (CTBS). Fifty-four of these students, or 38%, scored below their anticipated achievement in reading comprehension as predicted by the Test of Cognitive Skills (TCS). Students in Grades Five and Seven were administered both the CTBS and TCS (McGraw-Hill, Inc.) in April 1991, while scores for Grade Six students were taken from the previous year when the TCS was administered in April 1990. The national percentile (NP) score was used to identify the students scoring below their anticipated achievement. The NP scores were converted to normal curve equivalent (NCE) scores to allow for the manipulation of data in a consistent manner.

Table 1 lists the 27 identified 1991-1992 sixth grade students and their standardized test scores. These data represent a substantial number of incoming sixth graders labeled as underachievers in reading comprehension for the school year 1991-1992. Table 1 shows the students' anticipated and actual national percentile scores in reading comprehension on the CTBS. A difference was computed between the anticipated and actual achievement, as measured by the NCE scores.

The data for the 14 seventh graders identified as underachievers in reading comprehension are listed in Table 2. As noted above, scores for the 1991-1992 identified sixth and eighth graders were taken from the Spring 1991 CTBS and TCS. Because the TCS is only administered every two years, data for the 1991-1992 seventh graders were obtained using the Spring 1990 CTBS and TCS. Table 2 shows the 1990 test data for the identified seventh grade students with a difference computed for the anticipated versus actual achievement in reading comprehension, as measured by the NCE scores.

Table 1

1991-1992 Sixth Grade Student Data from Reading Comprehension Subtest on Comprehensive Test of Basic Skills (CTBS) and Test of Cognitive Skills (TCS), April 1991

Student	ANP-C[a]	ANCE[b]	NP-C[c]	NCE[d]	Dif[e]
601	60	55.3	44	46.8	-8.5
602	41	45.2	39	44.1	-1.1
603	94	82.7	91	78.2	-4.5
604	59	54.8	47	48.4	-6.4
605	45	47.4	24	35.1	-12.3
606	44	46.8	24	35.1	-11.7
607	65	58.1	57	53.7	-4.4
608	48	48.9	21	33.0	-15.9
609	54	52.1	9	21.8	-30.3
610	54	52.1	49	49.5	-2.6
611	70	61.0	43	46.3	-14.7
612	33	40.7	30	39.0	-1.7
613	96	86.9	60	55.3	-31.6
614	95	84.6	89	75.8	-8.8
615	53	51.6	22	33.7	-17.9
616	48	48.9	29	38.3	-10.6
617	71	61.7	31	39.6	-22.1
618	66	58.7	46	47.9	-10.8
619	45	47.4	27	37.1	-10.3
620	52	51.1	44	46.8	-4.3
621	38	43.6	27	37.1	-6.5
622	83	70.1	75	64.2	-5.9
623	31	39.6	28	37.7	-1.9
624	93	81.1	71	61.7	-19.4
625	95	84.6	72	62.3	-22.3
626	88	65.6	77	58.7	-6.9
627	44	46.8	25	35.8	-11.0

[a] ANP-C = Anticipated national percentile score on 1991 CTBS Reading Comprehension subtest, as determined by TCS. [b] ANCE = Anticipated normal curve equivalent score.
[c] NP-C = National percentile score on 1991 CTBS Reading Comprehension subtest.
[d] NCE = Normal curve equivalent score. [e] Dif = Difference computed by subtracting 1991 ANCE from NCE score.

At the start of this project, September 1991, the originally targeted group of 54 students was reduced to 51 pupils. Three students (701, 707, and 804) moved from the district prior to the actual date of implementation. Although evaluation of the project outcomes would be based only on the total number of students surviving the project, the sequence of consecutive numbers originally assigned to the identified students was retained when reporting data in tabular form, as shown in Tables 2 and 3. This would facilitate data interpretation and accommodate the students who might return to the district.

Table 2

1991-1992 Seventh Grade Student Data from Reading Comprehension Subtest on Comprehensive Test of Basic Skills (CTBS) and Test of Cognitive Skills (TCS), April 1990

Student #	ANP-C[a]	ANCE[b]	NP-C[c]	NCE[d]	Dif[e]
701	92	79.6	84	70.9	-8.7
702	85	71.8	77	65.6	-6.2
703	41	45.2	39	44.1	-1.1
704	91	78.2	80	67.7	-10.5
705	59	54.8	14	27.2	-27.6
706	43	46.3	1	1.0	-46.2
707	35	41.9	6	17.3	-24.6
708	47	48.4	23	34.4	-14.0
709	53	51.6	46	47.9	-3.7
710	60	55.3	34	41.3	-14.0
711	47	48.4	43	46.3	-2.1
712	43	46.3	11	24.2	-22.1
713	60	55.3	17	29.9	-25.4
714	83	70.1	82	69.3	-0.8

[a] ANP-C = Anticipated national percentile score on 1990 CTBS Reading Comprehension subtest, as determined by TCS. [b] ANCE = Anticipated normal curve equivalent score. [c] NP-C = National percentile score on CTBS Reading Comprehension subtest. [d] NCE = Normal curve equivalent score. [e] Dif = Difference computed by subtracting 1990 ANCE from NCE score.

Thirteen of the 1991-1992 eighth grade students were identified as underachievers using test results from the previous spring administration. Their anticipated and actual achievement, as determined by the April 1991 CTBS and TCS, are depicted in Table 3 with a computed difference between the two NCE scores.

Table 3

1991-1992 Eighth Grade Student Data from Reading Comprehension Subtest on Comprehensive Test of Basic Skills (CTBS) and Test of Cognitive Skills (TCS), April 1991

Student #	ANP-C[a]	ANCE[b]	NP-C[c]	NCE[d]	Dif[e]
801	35	41.9	34	41.3	-0.6
802	41	45.2	33	40.7	-4.5
803	84	70.9	66	58.7	-12.2
804	62	56.4	44	46.8	-9.6
805	66	58.7	58	54.2	-4.5
806	74	63.5	70	61.0	-2.5
807	88	74.7	67	59.3	-15.4
808	35	41.9	29	38.3	-3.6
809	34	41.3	18	30.7	-10.6
810	61	55.9	41	45.2	-10.7
811	73	62.9	37	43.0	-19.9
812	49	49.5	5	15.4	-34.1
813	47	48.4	42	45.8	-2.6

[a]ANP-C = Anticipated national percentile score on 1991 CTBS reading comprehension subtest, as determined by TCS. [b]ANCE = Anticipated normal curve equivalent score. [c]NP-C = National percentile score on 1991 CTBS reading comprehension subtest. [d]NCE = Normal curve equivalent score. [e]Dif = Difference computed by subtracting 1991 ANCE from NCE score.

Prior to 1991-1992, the district concentrated on low achievement in reading, without regard to anticipated achievement scores on the CTBS. Specifically targeted in the past were those students who fell below a state-determined minimum level of proficiency (MLP) on the CTBS. In the case of reading, the MLP was the 22nd percentile for eighth grade; 23rd for seventh grade; the 27th for sixth grade; and the 15th national percentile for fifth grade. Only seven of the students identified in this problem context fell below the MLP. The other 47 students scored above the MLP, but fell below their expected achievement in reading comprehension as determined by the Test of Cognitive Skills. Table 4 depicts the mean difference between CTBS and TCS scores for each grade level. As noted above, the national percentile scores were converted to normal curve equivalent scores to facilitate manipulation of these data. The mean differences show achievement was well below the anticipated reading comprehension scores. At a minimum, students were expected to achieve at their ability level. To the writer's knowledge, such a discrepancy has not before been examined at Franklin. For the 1991-1992 school year, a district objective was written to address this specific discrepancy between anticipated and actual achievement in reading comprehension (see Appendix A).

What was evident, prior to 1991-1992, was a decreasing use of the library as students entered the upper elementary level. Unlike students in Kindergarten through Grade Four who were scheduled for weekly library class visits, students in Grades Five through Eight were not scheduled to visit the library on a regular basis. Classes scheduled visits when a particular research or book report project was assigned. Otherwise, students visited individually at the discretion of their classroom teachers. Through observation and consultation with the librarian, other staff members and students, it appeared other instructional demands and competing interests limited student access to, or interest in, the library.

Table 4

Mean Difference Between Anticipated and Actual Achievement in Reading Comprehension for Targeted Students on 1991 CTBS

Grade	n[a]	NCE[b]	ANCE[c]	Dif[d]
6	27	46.78	58.05	-11.27
7[e]	14	41.94	56.66	-14.72
8	13	44.65	54.70	-10.05
Total	54	45.01	56.89	-11.88

[a] Number of identified students tested. [b] NCE = Normal curve equivalent score. [c] ANCE = Anticipated NCE. [d] Dif = Difference between NCE and ANCE scores. [e] Grade Seven scores from 1990 CTBS/TCS.

Evidence of Problem Discrepancy

The 54 students identified as not achieving their expected level in reading comprehension as measured by the CTBS encompassed a wide range, missing their anticipated scores by as little as 1 national percentile point and as much as 45 national percentile points. It is noteworthy that the identified students' reading comprehension achievement scores ranged from a low national percentile of 1 to a high score of 91, while the lowest anticipated score was 31 and the highest anticipated score was 96. (See Tables 1-3 for individual national percentile scores.)

Such a diverse representation of ability levels hindered many simple means of comparison typically utilized to document problem background and, in turn, track future progress. For instance, the wide variety of students' ability did not permit homogeneous grouping or specific lesson planning tailored to a single group. The context would have been too difficult for some, and yet, unchallenging for others.

This unique melange blended students of the highest and lowest ability levels, with diverse educational and family backgrounds. The 54 identified students had been instructed by various teachers in reading and other subject areas. The faculty members employed varying instructional modes and teacher expectations according to the ability levels of the individual student. The disparity in educational background and individual ability of these students precluded any meaningful degree of comparison in these areas. What these identified students did share was the same standardized testing experience, namely the CTBS and TCS, in which all achieved below their anticipated ability in reading comprehension.

Interestingly, the majority of these students did appreciably better on the other components of the same CTBS assessment, achieving closer to their anticipated ability, as predicted by the TCS. In several cases, the students exceeded their anticipated achievement. Table 5 depicts the mean difference between anticipated and actual achievement on the major test batteries of the CTBS (total reading, language, math, and total CTBS test battery), using the NCE scores.

Appendix B includes individual student data used to determine the discrepancy between the anticipated and actual achievement in each test battery. Although the mean differences show each grade level scored below their anticipated achievement on each battery, the majority of students performed better in these four batteries than they did on the reading comprehension subtest alone (see Table 4). Indeed, 41 of the 54 students, or 76%, showed less discrepancy between their anticipated and actual achievement on the total test battery when compared to their reading comprehension subtest scores. The group, as a whole, also performed better on the language and math batteries. Specifically, 43 students, or 80%, had less discrepancy between their anticipated and actual achievement in language, and 40 students, or 74%, achieved closer to their anticipated scores in math than they did on their reading comprehension subtest. Interestingly, 21, or 39%, of the students in this project actually met or exceeded their anticipated achievement on the total math battery. On the language battery, 23 students, or 43%, met or exceeded their anticipated score.

Table 5

Mean Differences Between Anticipated and Actual Achievement on 1991 CTBS Major Test Batteries as Measured by NCE Scores

Grade	n[a]	Test Battery			
		Total reading	Total language	Total math	Total battery
6	27	-8.92	-4.16	-0.61	- 5.94
7[b]	14	-15.12	-8.14	-11.95	-12.68
8	13	-6.45	-1.70	-0.06	- 3.25
Total	54	-0.05	-4.61	-3.42	- 6.39

Note. See Appendix B for actual data for individual students. Differences were calculated by subtracting the ANCE from the NCE score.

[a] n = Number of identified students tested. [b] Scores for Grade Seven taken from 1990 CTBS/TCS, as opposed to 1991 scores used for Grades Six and Eight.

Even in reading, when examining the total reading battery which included subtests in vocabulary and reading comprehension, 35 students, or 65%, achieved a score closer to their anticipated achievement than they did on the comprehension test alone. Eight of the 54 students actually exceeded their anticipated achievement on the total reading battery, indicating their vocabulary subtest scores compensated for their lower achievement in reading comprehension. However, the vocabulary subtest scores generally showed greater disparity between actual and anticipated achievement than was exhibited in the language, math, and total test batteries. Vocabulary is important to this project because word meaning affects one's understanding of print material. Conversely, comprehending written passages enables readers to understand unfamiliar words using context clues. Table 6 shows the mean differences between the anticipated and actual achievement on the CTBS vocabulary subtest. Again, normal curve equivalent scores were used to obtain an aggregate mean for data comparison.

Table 6

Mean Differences Between Anticipated and Actual Achievement in Vocabulary for Targeted Students on 1991 CTBS

Grade	n[a]	NCE[b]	ANCE[c]	Dif[d]
6	27	53.03	59.41	-6.38
7[e]	14	44.94	58.22	-13.28
8	13	50.43	55.33	-4.90
Total	54	50.31	58.12	-7.81

[a] n = Number of identified students tested. [b] NCE = Normal curve equivalent score. [c] ANCE = Anticipated NCE. [d] Dif = Difference between NCE and ANCE scores. [e] Grade Seven scores from 1990 CTBS/TCS.

According to M. Goldberg, senior evaluation consultant of McGraw Hill, (personal communication, September 25, 1991), the prediction of anticipated achievement was determined by computing an average achievement score from students who obtained a similar score on the Test of Cognitive Skills, an aptitude test. For example, those students who scored a 110 on the TCS when the test was normed would have their CTBS reading comprehension scores computed and averaged to determine a mean, or predicted score, for future students with a similar TCS score. Test users may refer to the anticipated achievement scores to compare an individual's achievement level with that of others of the same age, grade, and academic aptitude.

> The difference between a student's anticipated and obtained scores is an estimate of the extent to which the student's obtained achievement falls below or above the typical score of students with similar attributes. This difference is reported as a plus (+) or minus (-) on the Class Record Sheet and the Individual Test Record only if the difference is statistically significant at the .20 level. That is, such a difference is reported when the probability that so large a difference would occur by chance is .20. (CTB/McGraw-Hill, 1983: 56)

In this project, 10 students were reported as having such a significant difference between obtained and anticipated achievement scores in reading comprehension where the obtained score was below the anticipated score. Furthermore, all students who had scores showing any underachievement (a minus difference) between the obtained and anticipated scores were identified and considered in this project. Those who were identified as having a statistically significant difference were closely monitored by the staff. Hopefully, all students at Franklin, including those who were equal to or above their anticipated scores, benefited from the strategies and activities proposed for the underachievers. This possible side effect was of extreme importance to the manager, who was most concerned that reading achievement continue to improve for every student.

Possible Causes

Given the existing problem, it was the manager's task to identify possible causes so that appropriate interventions could be applied to eliminate or lessen the identified problem. In this regard, the following phenomena were put forth as possible causes, particularly as they applied to Franklin Elementary School.

One cause for the discrepancy between anticipated achievement (ability) in reading comprehension and actual achievement may be as simple, and yet as powerful, as not exercising one's ability. If one is able, yet does not apply this ability, the result may be similar to that of a muscle which is not exercised. Specifically, muscles, having work potential, atrophy with little or no use. Likewise, if students possess the cognitive abilities required to read, yet elect not to develop these abilities by engaging in reading, their reading potential will not be achieved. As Estes (1971: 135) stated, "The value of reading ability lies in its use rather than in its possession." Engaging in reading may result from teacher or parent direction, or from self-direction. Motivation is a key ingredient in an individual's reading engagement. Carbo (1987: 199) noted that the "motivation to read and amount of voluntary reading--both potent factors in determining reading ability--decrease throughout the grades."

For the months of March, April, and May 1991, the librarian maintained circulation statistics. These statistics were most focused on the fiction collection. They represented a comparison between Grades Five through Eight and the remaining grade levels. Although these data were inconclusive, they did suggest pupils in the upper grades utilized the school library less than the pupils in the younger grades, specifically selecting less fiction material than their younger counterparts. Table 7 depicts the limited number of fiction books circulated in Grades Five through Eight. These statistics represent the number of books circulated by all fifth through eighth grade students. Although these data are historic and cannot be directly linked to the 54 students who were later identified as underachievers, they do address the low level of student interest and/or engagement in reading in the upper grades.

Whether motivation is intrinsic or extrinsic, the students in Grades Five through Eight have not appeared to utilize the school's library as much as Kindergarten through Grade Four, specifically with regard to fiction books circulation. Fiction books were specified in this preliminary survey because the genre is most likely to be read in full, as compared to nonfiction and reference books being used for a specific task and not necessarily read entirely. Although

Table 7

Library Circulation Statistics (Number of Books Checked Out), March-May 1991

	Fiction books by grade					Picture books K-8	Total non-fiction K-8
Month	8	7	6	5	K-4		
March	10	12	19	70	288	732	1340
April	7	42	13	14	264	551	1081
May	9	23	6	38	411	784	1303
Total	26	77	38	122	963	2067	3724

these data were not conclusive because nonfiction circulation record keeping was non-discriminatory between Grades Five through Eight and Kindergarten through Grade Four, there was a strong indication that circulation in general, and circulation of fiction books specifically, favored the younger Kindergarten through fourth grade students. This indicator, coupled with a student survey, May 1991, for all students in Grades Five through Eight regarding reading attitudes and behavior (see Appendix C and analysis of Table 8), suggested a substantial number of these students were not engaged in reading as much as one would wish. Of course, the inference was that by engaging in reading, one becomes a better reader and comprehends more readily. Indeed, Flood and Lapp (1990: 495) noted, "Several studies have revealed convincing data that suggests students who engage in voluntary reading significantly outperform students who do not on many different measures of comprehension."

Table 8 depicts student response data to the first 10 questions on a May 1991 reading survey administered to all students in Grades Five through Eight. The students' responses to several items on the survey underscored the above assertions. (See Appendix C for the complete survey.)

Responses to survey Item 1, "At school, I like to read in my free time," were noteworthy. Certainly 68 of the total 137 students surveyed, or 50% of all fifth through eighth graders, expressing that they never or rarely liked to read during their free time bespeaks of student motivation, or lack thereof. Teachers must give students the opportunity to read in school. Erazmus (1987: 13) believes that "there are so many distractions outside of school that teachers cannot depend on students reading outside the classroom."

Table 8

Responses to Reading Survey (Items 1-10) - May 1991 Total Student Population, Grades Five through Eight

Item	n[a]	Responses to Survey Items				
		Never	Rarely	Sometimes	Often	Always
1	137	24	44	46	15	8
		18%	32%	34%	11%	6%
2	136	15	31	48	30	12
		11%	23%	35%	22%	9%
3	135	12	49	44	18	12
		9%	36%	33%	13%	9%
4	137	35	20	32	30	20
		26%	15%	23%	22%	15%
5	136	16	21	33	31	35
		12%	15%	24%	23%	26%
6	136	5	16	34	28	53
		4%	12%	25%	21%	39%
7	136	11	24	50	28	23
		8%	18%	37%	21%	17%
8	136	16	45	43	23	9
		12%	33%	32%	17%	7%
9	135	13	21	29	33	39
		10%	16%	21%	24%	29%
10	137	52	35	25	13	12
		38%	26%	18%	9%	9%

[a] n = Number of students responding to item.

In responding to Item 2, "I visit the school library for my own interest," 46 students, or 34%, as shown in Table 8, expressed that they rarely or never visited the school's library for their own interest. Given the circulation statistics, these data corroborated the notion that the older students utilized the library less than the younger students (see Table 7). This phenomenon was of consequence considering the number of volumes that the library contained. Specifically, the library housed well over 12,000 selections and, as a former Kindergarten through high school building, the collection contained selections to interest readers of all levels. Further, the library budget for purchase of new books averaged $6,000 per year since 1987.

Student responses to Item 4, "At home, I read for pleasure when I have time," were also notable. As depicted in Table 8, a substantial number of students, 55, or 41% of those surveyed, rarely or never read for pleasure at home when they had time. One can logically suppose, and a review of literature confirms, not reading voluntarily can result in discrepancies between one's innate ability and one's achievement in reading comprehension. In survey Item 6, "I prefer watching TV to reading a book," the overwhelming response for the preference of 81 students, or 60%, to watching television over reading a book is another indicator that reading had a lower desirability rating than other activities, such as viewing T.V. It is noteworthy and encouraging that 40% indicated that reading was equally or more valued than viewing television. Tunnell's findings (1989: 476) supported the results of this survey, specifically related to Items 4 and 6. Advocating a literature-based approach to literacy, he cited several studies that unfortunately showed students spend very little time reading after school. For example, in one study of fifth grade students, "television watching consumed most of their after-school time (an average of 136.4 minutes daily)."

Students' responses to Item 9, "When I start reading a book, I finish the whole thing," were, perhaps, most telling with regard to students' motivation and feelings about reading. As shown in Table 8, only 39 students, or 29%, always completed a book they began reading.

Clearly, 47%, or almost half of the students surveyed, did not complete books with the regularity to merit an "often" or "always" response. Children who enjoy and comprehend what they are reading would, hopefully, complete their books with greater frequency.

Survey Item 10 asked students to respond to the statement, "I like to talk with others about the things I read." Responses (see Table 8) may have many possible explanations, or generate questions, with regard to why the students answered as they did. Of interest is the implication that students who like to talk with others about what they have read, must have read and understood the book. Only 18% of these surveyed students responded "often" or "always" to this item.

In conjunction with the items reported above, a case can be made that many Franklin students in Grades Five through Eight were less engaged in reading than those involved with the instruction of students would desire. This proposition is further substantiated by the students' response to an item on the reverse side of the same May 1991 student survey (see Appendix C). Specifically, of the 115 students responding to the question, "How many books have you read this past year?" at least 56%, or 64 students, read fewer than ten books. This calculation is conservative because it does not include the 22 students who did not respond to this question, yet were likely to have also read less than 10 books.

An additional concern about this response is the unanswered question whether these books were read in their entirety, as one would hope, or if these books were begun but not completed, as indicated by the students in survey Item 9 analyzed above. As noted earlier, the discrepancy between comprehension ability and achievement is quite possibly linked to exercising one's ability through reading. Indeed, a substantial number of students in Grades Five through Eight in 1990-1991 appeared to be reading less than desired.

As previously cited (Carbo, 1987), interwoven with the amount of voluntary reading is the motivation to read as another possible cause for the discrepancy between ability and achievement. Motivation logically plays a part in engaging in reading or any activity. One influence in motivating young students to read is whether or not reading, especially reading for pleasure, is an activity the students see modeled by their parents. The May 1991 student survey addressed this situation. In Table 8, responses to survey Item 5 showed 37 students, or 27%, indicated that they never or rarely saw their parents reading for pleasure. Such a message to students must have some impact on them. Trelease (1989: 8), writing as a parent, said, "In teaching a child how to read, we have forgotten to teach him to want to read. And there is the key: desire."

A lack of motivation to read is inextricably linked to one's attitude. If one dislikes something, there is less proclivity to engage in that activity. To further assess students' attitudes toward reading, the Estes Reading Survey was administered to the September 1991 sixth, seventh, and eighth grade students. In this endeavor, the scores of the identified underachievers were able to be separated from their fellow classmates by having the students identify their birthdate and gender on the survey forms. See Appendix D for the resulting data which were generated from the targeted students' responses on the Estes Survey.

The data generated from the Estes Survey enabled the writer to quantify students' attitudes toward reading. Specifically, individual's scores were tabulated by grade level and averaged. These averages, or means, could then be compared by grade level and longitudinally over the next 18 months. Prior to tabulating the individual scores, the students' responses had to be made directionally consistent. That is, since the survey items were a combination of positive and negative statements, the negative items had to be reassigned values that would reflect appropriate ratings if the items were written or skewed in a positive direction. All but five survey items (numbers 3, 6, 10, 13, and 14) happened to be worded in such a way that they were negatively skewed. For the 10 negative survey items, the mirror response was recorded to change the negative value to a positive. All positive item responses remained the same. This manipulation allowed the manager to sum the scores and determine a mean or average, based on a scale of one to five, where five equaled a most positive attitude toward reading and one equaled a least positive attitude.

Table 9 depicts these data as grade level averages for the targeted underachievers for each of the 15 items on the 1991 Estes Survey. The items which were most positively rated, item one (3.57) and item seven (3.54), suggested many of the underachievers believed "reading is not only for learning but also for enjoyment"

Table 9

Mean Score of Estes Survey for Targeted Students - September 1991

Survey item	Grade		
	6	7	8
1	3.43	3.73	3.67
2	2.91	3.00	3.42
3	3.63	3.00	3.17
4	3.54	3.09	2.90
5	2.57	2.27	2.58
6	2.65	3.09	3.17
7	3.78	3.18	3.75
8	3.04	2.82	2.83
9	3.39	3.18	3.42
10	3.61	2.82	3.83
11	3.77	3.00	3.75
12	3.00	2.55	3.83
13	2.96	3.18	2.58
14	2.90	2.45	3.17
15	3.65	3.09	3.50
Total	3.26	2.96	3.30

Note. Maximum score = 5.00. The number of students responding to survey were: Grade Six = 23, Grade Seven = 11, and Grade Eight = 12.

and "books are usually good enough to finish." Specifically, 31 of the 46 targeted students who responded to item one, or 67%, agreed/strongly agreed that reading is for enjoyment as well as learning, and 27 students, or 59% of those surveyed agreed/strongly agreed that books were good enough to finish.

Conversely, the items least favorably rated by the targeted students were item five (2.50) and item 14 (2.80). Item five had 22 of the 46 respondents, or 48%, disagree/strongly disagree that reading was better than watching T.V. Note: another 15 students remained neutral on this item, leaving only 9 students who would rather read. Item 14, "Books make good presents," also generated an overall negative response. Specifically, 18 of the 46 respondents, or 39%, disagreed/strongly disagreed that books make good presents. Another 12 students remained neutral on this item, leaving only 16 students suggesting books make good presents.

Finally, the targeted students in Grades Six and Eight appeared to enjoy reading more than the targeted seventh grade students based on the Estes Survey responses. The mean scores for the identified students on the total survey were: eighth grade = 3.30, seventh grade = 2.96, and sixth grade = 3.26. Only Grade Seven fell below the neutral value of three. Overall, the average score for the 46 respondents to this 1991 Estes Reading Survey was 3.18, slightly more positive than the neutral value of 3.00 (cannot decide). Although the above data are interesting, the primary purpose of this survey was to generate a database for comparison of students' attitudes toward reading after implementation of this project.

A third possible cause that may influence the difference between comprehension ability and achievement is closely related to lack of motivation and voluntary reading. Some students may not have been given enough opportunities to read. In May 1991, the teachers of students in Grades Five through Eight were surveyed regarding their perceptions of students' reading habits and their own reading practices in the classroom. Appendix E includes the complete survey and tallied results. Survey Item 7 asked if daily plans include time for sustained silent reading. The results indicated that two teachers never included such time, one teacher rarely included such time, two other teachers sometimes included such time, and only three teachers often included such time for reading silently in a sustained fashion. It is interesting to note that all eight teachers responding to this survey were responsible for teaching reading. A review of the sources showed that exposure to books impacts reading scores in a positive way. Students need less drills and skills and more "real reading" and role modeling. Anderson, Wilson, and Fielding (1986) agreed, both teachers and parents need to give a higher priority to promoting book reading.

Of these same fifth through eighth grade teachers responding to Item 9: "I require students to check out books from the library," responses indicated that three of the eight teachers, or 37.5%, rarely required students to check out library books. The statistic represented a substantial number of teachers and the students with whom they worked. This was noteworthy, given the limited number of books located in individual classroom libraries. The teachers were also surveyed regarding the novels they used in their reading instruction. The 1991-1992 sixth grade curriculum included two novels. Seventh grade used three novels, and five titles were included in the eighth grade curriculum. These novels represented a literature-based (whole book) approach and they supplemented basal readers used in Grades Five through Seven and anthologies used in Grade Eight.

A fourth possible cause related to the family background of the students in this project. The Franklin community, although diverse with regard to economic wealth, has been generally considered lower to middle income class. Franklin's students, in many cases, came from homes where parents had low to moderate incomes, had not pursued education beyond high school, and may not have had the desire or the wherewithal to guide their children toward college. This condition has been exacerbated in the 1990s by the current recession and rise in unemployment in Franklin, as well as throughout New Jersey.

Although much, if not all, of the social and economic hardship was beyond the control of this project manager, it was helpful to understand the external/community influences and their impact on this project. Such awareness permitted the manager to focus resources and energy into activities which would have been more ably supported by parents. In this regard, all of the possible causes were considered in the overall context of this project setting.

Chapter 3

Problem Situation and Context

Influences in the Immediate Problem Setting

The Franklin School District is a single Kindergarten through Grade Eight building which served approximately 600 students in 1991-1992. During that year, this district employed 62 professional and 25 support staff (both full and part-time). The nine member board of education, elected by the community, serves as the school's governing and policy-making body for the borough school.

As recently as 1982, Franklin School District housed a K-12 school program within its single building. In 1982, Franklin High School ceased to exist as the outlying communities and the Borough of Franklin had voted to regionalize the high school, creating a new school district housed in a neighboring community for ninth through twelfth grade students. This organizational change relieved the school's overcrowding, provided wonderful facilities for the elementary program, and brought about several lawsuits as a result of reduction in force procedures when many of the high school faculty were dismissed. This litigation was, in part, resolved through negotiated agreements and also through findings by administrative law decisions. Several of the teachers who were employed in the high school continued to serve as elementary teachers by obtaining elementary certification to avoid being RIFed (reduced in force) or dismissed. The climate was tense and nine years later remained cautious.

From 1982 to 1992, three different superintendents, three different elementary principals, and two different vice principals served the district. The child study team also experienced a high turnover rate. The present superintendent, who is the manager, had been employed since September 1987. From 1987 to 1991, 18 different members have served on the board of education. This amount of turnover, coupled with the experiences associated with closing the high school, had caused many to remain cautious and guarded. Further, since 1987, many teachers were reassigned to teach different grade levels. These involuntary transfers were the first in many years, perhaps ever. Several teachers had been in the same grade level for more than 20 years. This history serves to underscore the difficulty in introducing new activities or procedures and having them readily accepted by the staff. Much effort was needed to build trust and then commitment to changes.

Some of this effort included developing curriculum committees, comprised of faculty and administration, which had substantial input into the curriculum. Specifically, the reading committee included six teachers, the principal, vice principal and, due to the importance of the committee's influence on this project, the manager/superintendent. This group had considerable input into what would happen throughout the school with regard to reading. In general, when texts were reviewed by the various curriculum committees, those deemed most appropriate were circulated to the full staff for comment and presentations were arranged for the full staff. Although it appeared some mistrust continued, through such efforts as those described above, and the fact that the staff's input was sought and acted upon, a more cooperative climate was being cultivated.

The board of education has had considerable changes since this writer began in Franklin as superintendent in 1987. This superintendent had worked with three different board presidents by 1990. The board had not been a "rubber stamp" of the superintendent's recommendations, nor did the members agree with one another on all matters. However, the board had shown consistency in their decisions, especially with regard to policy and governance.

Another factor which negatively influenced this project was the program cut for the 1992-1993 school year. Certainly the 1991-1992 budget defeat caused concern regarding programs. In this case, the board was able to transfer monies from surplus ($366,000) to maintain program for the 1991-1992 year. With the surplus funds depleted and less than

$200,000 remaining, additional budget cuts were directly tied to program and personnel reductions. Such measures would have a definite impact on the quality of instruction, as well as staff morale. For this project in Grades Six through Eight, three of the eight 1991-1992 teachers realized they were in danger of being RIFed. As April 1992 approached, these teachers had many concerns on their minds, not the least of which was continued employment. Indeed, the 1992-1993 school year began with one teacher RIFed and another voluntarily leaving the district.

Another hindering factor was the instructional demand for teachers to do more than focus on reading alone. As of 1991, New Jersey began requiring eighth graders to take an Early Warning Test (EWT) which identified students at-risk for the 11th grade graduation test, the High School Proficiency Test (HSPT). The EWT, assessing the areas of reading, writing, and math, showed each of these areas needed improvement, according to 1991 test results, and had the middle grade level teachers re-evaluating their curriculum in light of this test. Additionally, greater pressure was placed on teachers as the state made the scores available to the public for comparison among districts.

On the other hand, there are several influences which were very helpful in accomplishing this project. First, the eight teachers directly involved with teaching reading in the middle grades were experienced. Although the grade assignment was new for three of these teachers in 1991, they had demonstrated effective instruction in the past, had worked with this aged child before, and had taken additional coursework beyond the B.A. Half had a master's degree. Most of these teachers had exemplary evaluations. One teacher was in need of support and received this support throughout 1991-1992 via the principal and vice principal. With this exception, the other teachers had often evidenced an ability to motivate students.

Another helpful influence was the school's librarian and the library facility. Receptive to students and staff, the librarian maintained an impressive facility, housing a print collection of more than 12,000 volumes. She had been able to purchase new materials annually which were of high quality. The school prided itself on the collection that had been developed. Many teachers have commented about the fine support they received from the librarian. The library had the services of a part-time aide as well. Both the librarian and the aide, assisted by several volunteers, coded the collection to add efficiency to a motivational reading program, Accelerated Reader, new for Grades Five through Eight, in 1991-1992.

The computer equipment, also new in 1991-1992, and software for this program were housed in the library, another helping factor. Students in the upper grades had easy access to the library as soon as school opened. It was noticeable as early as September 1991 that these students began to frequent the library more often to try to accumulate points in this computer-assisted assessment program. The library's bulletin board display of student progress helped to motivate students.

Having a public library in the borough was a positive influence on this project. A branch of the county library system is located about one half mile from the school. This enabled the students who belong to the library to avail themselves of more books than were housed in the school library.

The final helping influence in this project was the universal belief that reading is of the utmost importance in our society. When asked which subject area is most important in elementary school, all respondents said, reading. Our society has become dependent on the written word.

Influences in the Broader Community External to the Problem Setting

The following influences are extensions of those cited above. The borough, experiencing difficult economic times, voted the school's budget down twice between 1989-1991. Perhaps more distressing was the active campaigning by a local politician and anti-tax group, as "concerned citizens," to defeat the 1991-1992 school budget. Such actions exemplify the seriousness of individuals to hold taxes down at the school program's expense.

An additional hindering factor involved the number of students with special needs enrolling in Franklin. Although these students were not part of the targeted group of this project, they required services that may have siphoned resources from the target population. Indeed, special education students who newly enrolled in Franklin during the 1990-1991 school year accounted for 50% of new enrollees (13 of 26). In the 1991-1992 year, 12 of the 42 new students, or 28%, enrolled as special education students. As school resources became more scarce, especially in light of defeated budgets, such enrollment phenomena impacted program (e.g., special education class size is controlled by state law).

A final hindering factor was related to the general tax backlash occurring throughout New Jersey. A major focus of this backlash was education. Governor Florio's tax increase was first announced to fund education, specifically the Quality Education Act (QEA) which attempted to comply with the State Supreme Court's ruling on Burke v. Abbott, declaring past educational funding formulas unconstitutional. Unfortunately, the backlash caused political compromise which reduced educational aid substantially. However, taxes were not proportionally reduced or so was the perception of the property taxpayer. This caused many to direct their tax anger at schools and perhaps encouraged some to rationalize their anger by claiming the failure of schools even when such claims were unjustified. Such perceptions threatened disaster.

Some helpful influences were formed in the larger community outside the problem setting. Specifically, the school's student population has continued to grow. The population in 1986-1987 was 520. The 1991-1992 population was 618. New residents brought with them expectations for a school program similar to those in their previous districts. Also, state aid has increased as student population increased. Finally, additional growth provided a persuasive argument for the importance of maintaining educational programs for the community's youth.

Chapter 4

Problem Conceptualization, Solution Strategy, and Project Outcomes

Review of the Literature and Consultation with Others

A review of the literature indicated that the problem of student underachievement, especially related to reading comprehension, had several points of impact. Although five separate areas are delineated below, they are closely related and may not be easily isolated from one another. Indeed, one condition may well influence a corresponding condition, reducing the writer to wonder--not unlike the chicken or the egg scenario--which came first? For the purpose of this project, the findings from the review of literature and interviews of knowledgeable others have been divided into the following five areas: (a) the value of reading frequently, (b) the impact of student attitude, (c) the importance of role-modeling and providing opportunities to read, (d) the influence of family background, and (e) the significance of motivation and incentives for reading. The sources cited below regarding these five interrelated areas address situations similar to the project's setting and/or suggest solution strategies applicable to the targeted age group.

Value of frequent reading. For this project, the students identified as underachievers were enrolled in sixth, seventh or eighth grades in 1991-1992. Prior to 1991-1992, each student had one daily 41-minute period of formal reading instruction. Beyond this minimal time for reading instruction, most reading occurred as a by-product of other subject areas (e.g. social studies, science) and as free or leisure reading if time allowed and an individual so chose. Such a minimal emphasis on reading caused one to consider the value placed on reading frequently. Indeed, Lohr and McGrevin (1987: 68) stated, "Schools must focus not only on illiteracy--those who can't read--but also aliteracy--those who don't read." Supporting this position on reading's importance in learning, Estes and Johnstone (1977: 894) believed, "the learning of explicit rules is neither necessary nor sufficient to the task of learning to read. Quite to the contrary, in fact, the reader needs to develop tacit strategies by practice in reading to learn." This position appears to gain credibility as the child ages. For the older reader, reading takes on the dual role of providing pleasure as a leisure time activity and reading for a purpose, such as increasing one's knowledge. These are not necessarily mutually exclusive activities.

Of course, the more one reads, the more fluid, comfortable and adept one becomes at reading. Howard (1988: 40) espoused that "nothing builds reading ability as much as time spent reading." This view of increasing one's reading ability by increasing one's reading activity is quite logical. Harste (1985 8:6-7) concurred, "We must make time to work on comprehension.... The easiest way to do this is by providing daily invitations to do real reading and real writing for real purposes." A fitting analogy explained,

> Like throwing a baseball or playing a piano,...the more you practice (read), the better you get at it; and the better you get at it, the more you like it; and the more you like it, the more you do it.... [D]esire...must be planted by parents and teachers who work at it. (Trelease, 1989: 8)

P. R. Crook, University of Virginia School of Education, (personal communication, August 23, 1991) agreed that increased reading plays an important role in increasing one's reading comprehension. In separate interviews, E. Goodin, Rutgers University School of Library and Information Studies, (personal communication, August 22, 1991) and B. A. Lehman, Ohio State University School of Education, (personal communication, August 28, 1991) agreed on the importance of reading frequently. With such unanimity of belief, it seemed all one had to do to increase a student's reading achievement was to increase reading frequency. However, in consulting with knowledgeable others and studying the literature and the possible causes of the problem, it seemed such an endeavor might prove to be a formidable task. As noted in Chapter 2, data from a May 1991 Student Reading Survey and library circulation statistics from March through May 1991 indicated a lack of interest in reading for many fifth through eighth grade students at Franklin Elementary School. The literature review found this to be a common trend. In a study on reading growth and how children spend their time outside of school, fifth graders did little or no book reading. Yet, "among all the ways children spent their time, reading books was the best predictor of several measures of reading achievement" (Anderson, Wilson, & Fielding, 1986: 2). Lesesne (1991) also found middle school students were not reading for pleasure outside of school and school assignments. Again, while supporting the importance of reading, the finding that not much reading was being done outside the school was disconcerting. This was underscored in review of literature by Chall, Jacobs, and Baldwin which provided that "children at risk...tend to perform below norms in literacy on national, state, and school assessments. Moreover, the lag in their reading achievement becomes greater in later elementary school grades and high school" (1990: 1).

These findings created a sense of urgency for at-risk students. Furthermore, all Franklin students seemed to be more susceptible to performance gaps in reading achievement as they advanced in the upper grades. Chall et al. (1990: 159) warned, "Reading, writing or language deceleration is likely to increase with each succeeding grade."

Another U.S. survey found 54% of American 9-year olds reported reading most days for pleasure, but the percentage dropped to 35% for 13-year olds and decreased more so for 17-year olds (Pikulski, 1984: 558). Harris and Sipay (1980: 517) noted a marked decline in voluntary book reading at the age of 12 or 13, the age coinciding in time with increased homework and the teaching of literature. This aged student, usually a sixth or seventh grader, may have other competing interests as he or she enters adolescence. Of special note, however, was the statement that literature instruction is introduced at this time. Although it was only a passing comment by Harris and Sipay and there was no cause and effect claim made, the project manager was sensitized to this observation. Indeed, Larrick, an advocate of using trade books to teach reading instead of basals and their skill and drill approach, believed introducing literature should increase interest. Although her plea was made for primary-aged students, Larrick's urging to use real literature to "encourage children's love of reading while they are developing reading skills" (1987: 187) would likely be applicable in the upper grades also. Perhaps the key here is introducing literature, as advocated by Larrick, rather than using literature for skills and drills as may have been the case in the Harris and Sipay observation.

The need to increase children's reading, while understanding that many children in the middle grades do not read voluntarily, created a paradox. Flood and Lapp (1990: 495) expressed, "One contemporary approach to addressing the problems associated with aliteracy (those who can read but do not) has been the use of voluntary reading programs within and outside school." To increase reading for students, Lamme (1980) offered advice for the middle graders in Raising Readers by recommending stimulating reading materials in the home, visits to the public library, a quiet time daily in which all family members read, and continuing to read aloud from more challenging books. Lamme (1980: 175) also recommended that the older child should "...read aloud on a regular basis to a younger child--a sibling or a neighbor." These recommendations and additional strategies to increase an individual's reading frequency were considered to prove Harris and Sipay correct when they stated, "Increased reading time leads to improved reading achievement" (1980: 526).

Impact of student attitude. Attitude plays a substantial role in determining whether or not one engages in reading. The literature was replete with references to attitude toward reading and achievement. Hall (1978) indicated neither social class nor sex were proven to be reliable indicators of how students feel about reading. She did find attitudes and achievement in reading were highly correlated . "When ability improves, attitude often improves. When attitude improves, ability often improves. Determination of which factor influences the other is neither easy nor necessary" (Hall, 1978: 7). Bruneau (1986) undertook a similar study to compare upper elementary students' scores on measures of reading interest and comprehension. The degree of interest expressed in reading correlated positively with reading comprehension scores. Given that interest in reading relates to achievement, Bruneau stressed that "teachers should attempt to increase interest in reading while teaching reading skills....and making reading a pleasurable experience for all students" (Bruneau, 1986: 101). Reading comprehension generally is better when the reader is interested in the material. Indeed, when the interest is there, "they can satisfactorily comprehend material that would be considered above their instructional reading levels....Interest motivates one to read and put forth effort" (Harris & Sipay, 1980: 527).

Attitude is not the sole possession of the student. The teacher also has feelings about student attitude and its influence on reading achievement. Heathington and Alexander (1984) found that teachers realize the importance of developing positive attitudes toward reading, but they reportedly admit spending little time primarily focused on developing these attitudes. As noted in Chapter 3, a hindering factor to such endeavors may have been other instructional demands. Teachers may have felt pressured to focus attention elsewhere. However, many authors, like Ciccone (1981: 19), believed "a teacher's reading program must create a desire to read and help each pupil find pleasure and satisfaction in reading." Tunnell and Jacobs (1989) asserted positive attitudes toward reading will develop if students are permitted to select their own reading material. The importance of teacher attitude and leadership in creating positive reading experiences for students cannot be underestimated. It is through such positive involvement that students' attitudes are enhanced.

This whole discussion of attitude toward reading seemed even more significant when considering Duggins' belief that "sixth grade may be the pivotal year, the last period of maximal influence toward reading and school achievement" (1989: 5). Whether sixth, seventh, or fifth grade is indeed the pivotal year regarding the teacher's final influence with reading instruction, it seems unlikely that the student will welcome such instruction when reading requirements and other demands are increasing. Therefore, prior to high school, the elementary or middle school teacher must attempt to positively influence students' attitudes toward reading. Such ambitions are best achieved when the student meets success. Regardless of what particular method is proposed to encourage positive attitudes toward reading, the researchers seemed to agree that students must be given opportunities to read and enjoy the activity before attitudes can improve and thus positively influence reading growth and achievement.

The importance of role-modeling and opportunities to read. Smith (1989: 357) stated, "Children don't learn from what we exhort them to do; they learn from what they see us doing." Such an observation highlighted the importance of modeling behavior which is valued and, in turn, expected from students. Indeed, the cliche that actions speak louder than words is appropriate in the effort to encourage children to read whether at home or in school. However, as previously noted in Chapter 2, teachers in Grades Five through Eight were not providing opportunities to read or role-modeling in the classroom. Hartley (1990: 16) stressed that "one of the key elements in a middle school reading program should be allowing students time to read silently.... Students also need to see their teachers enjoying reading, too." Positive reading models are necessary for all children "to show in a genuine, natural way the essence, importance, and recreation of reading" (Ciccone, 1981: 15). Not only teachers and parents, but peers, as well as older children, may have a profound effect on one's reading interests. These individuals serve as models too. Harris and Sipay (1980: 523) affirmed, "Peers, friends, parents, and teachers influence reading interests directly through recommended or assigned reading and indirectly by serving as models." As children enter adolescence, peer influences appear to become very strong, and in many cases equal or surpass that of parents or teachers. However, teachers and parents continue to exert considerable influence in even those who are most influenced by peers. For that reason, it is important to model reading. Smith (1989: 357) stated, "Many children do not get the opportunity to be read to--at home or in school.... Most students never see their teachers reading for their own pleasure. And what they see is what they learn.... Children have to be shown that literacy is power." Reading aloud can provide a positive impact. As children "just relax and enjoy the experience....[they] may learn to associate reading with pleasure" (Perez, 1986: 10). B.A. Lehman (personal communication, August 28, 1991) also endorsed reading aloud to high school, as well as elementary, students. Lehman, in fact, read aloud to her college students and believed this contributed to their love for children's literature. Indeed, teachers and parents alike can be role models at any level. Further, Erazmus (1987) pointed out skill development is necessary, but the teacher should be cognizant of the importance of teaching the joy of reading.

If it is important for students to have reading role models, then the natural extension is that the children will have opportunities to read independently. This requires providing access to reading material, as well as scheduling time to read. Huck (1992: 523) stressed "we must reorder our priorities and give them time to read books of their own choosing inside school." Harste (1985), Carbo (1987), Chall (1983), and Howard (1988) emphasized the importance of having a variety of print materials available to students and allowing students the freedom to select their own choice. B. A. Lehman (personal communication, August 28, 1991) stated that self-selection may be the best way to increase a student's love of reading. E. Goodin (personal communication, August 22, 1991) felt strongly that the school librarian should develop a partnership with the classroom teacher. When selecting library materials, she said her first criteria was to support curriculum; second was her interest in increasing the literature collection. P. R. Crook (personal communication, August 23, 1991) advocated the student should have free use of the library.

Whether independent reading takes place in the home, the classroom, the school library, or the public library, the knowledgeable others and authors cited above believed that choice is important, as is the availability of a broad spectrum of materials. Perhaps B. A. Lehman's confidence in students best supported the idea that children will read what is appropriate. She stated, "I have incredible faith in students' abilities to pick what's best for themselves" (personal communication, August 28, 1991). Of course, accessibility will influence what a child may select to read. After a selection has been made, time must be provided to read. Sustained silent reading (SSR) is one vehicle that provides students with the opportunity to read during the school day. This motivates some students to continue to read outside school as well. Further, SSR provides teachers with the opportunity to model for their students. In an informal study by McCracken and McCracken where unsuccessful Sustained Silent Reading programs were examined, "in the majority of these programs, the teachers were not reading with their children" (Perez, 1986: 10). It is understood that opportunities to read should be considered part of an interaction. The other part of this interaction consists of the teacher's (or parent's) involvement with the child in providing instruction to help the child grow and increase understanding. It is important to provide opportunities to read many books on a wide range of topics that challenge students' ability. "When materials are challenging...teachers must provide appropriate instruction. When challenging materials are accompanied by such instruction, children...are more likely to grow...in reading comprehension" (Chall et al., 1990: 166). Harste (1985) discussed this interaction somewhat differently, yet with similar results, if reading comprehension is to improve. He described the best classrooms as those where "...trade books were readily available and uninterrupted time was scheduled for students to read and critically discuss [emphasis added.]" (1985: 8:6). Both views express the need that the reader interact with another to critically discuss, validate, or in some way, challenge one's ideas or interpretations. Certainly some kind of assessment of the student's understanding of what he or she read is necessary for growth to occur.

The influence of family background. Most educators, if not all, would concede that family background plays a major role in student achievement. The home environment can have a substantial influence on pupil attitudes toward reading. In her study of Reading Attitudes and Interests of Sixth Grade Pupils, Ciccone (1981: 15) notes possible variables influencing student reading interests included "...past reading experiences, amount of free time, number of responsibilities at home and in school, and availability of reading materials." Obviously, many of these variables depend on the family's ability to provide these for the child. A low-income family is less likely to have a large library in the home as compared to a family which has much disposable income. Likewise, an intact family may have more time to spend reading with children than a family with a single parent who is having financial difficulties and must work two jobs to survive economically. Also, highly educated parents may have different expectations for their children than the parent who has little formal schooling.

Chall et al. (1990: 158) stated that beginning with the middle grades, "...many parents of low-income children cannot provide the help with homework that may be needed." Such a statement underscored the difficulty students from such families must experience in coping with school assignments. The differences between student support systems can be enormous. Although family background has proved to be a major contributing factor to students' achievement, schools and teachers can have an impact on the development of low achievers, according to Chall et al. (1990). Duggins (1989: 6) pointed out that even if the home does promote reading, "at the junior high age, parents are not as influential.... This is also a time when school interventions...could be most effective."

At times, however, the family background factor has proved most frustrating for educators. Teachers and school administrators may feel they have little influence on this variable. According to a study of the role of the family in underachievement,

> (a) the principal reference system of the adolescent is his peer group;
> (b) the present mobile and fragmented home and school life make the development of socially acceptable norms and values difficult, if not impossible, for many students; and
> (c) the adolescent does not function simply in the context of peer group interaction--he is also significantly affected by his interaction within the family. (Gurman, 1970: 48).

Flood and Lapp (1990: 490-91) noted, "It has been found that a reader's prior knowledge, experience, attitude and perspective determine the ways in which information is perceived, understood, valued, and stored." Certainly these dynamics are shaped by home background. However, schools play a part in shaping these as well. Teachers can provide new knowledge, build from shared experiences, encourage changes in attitude, and expand one's perspective.

Therefore, these three influences all play a role in the development and achievement of the individual: family, the school, and peers. Common sense dictates that each influence has a different impact on every individual and may differ further regarding the specific task involved. Given these fluid conditions and the educator's inability to control home background, the manager conceded, perhaps the best to be sought at this time was to involve parents in the students' reading program, as suggested by Harste (1985: 8:68).

The significance of motivation and reading incentives. Several sources addressed the value of motivating students to read. One such article described a computerized reading program, Accelerated Reader, which allowed students to select a book from several hundred titles, read it, and then assess their understanding of the book by completing a short multiple-choice test via the computer. A high proportion of correct responses earned the student points, while a lesser proportion of correct responses provided no points. The number of possible points was dependent on the difficulty of the book. In addition to witnessing standardized reading test scores for fourth through sixth grade rise 12 percentage points in 1988 and 15 percentage points in 1989, the principal reported that "the most noticeable benefit of the Accelerated Reader program has been the students' increased desire for outside reading" (Roland, 1990: 52). He credited the computer as sparking an interest in students who "are discovering the joy of reading good literature and building a love for reading" (1990: 52). Accelerated Reader provided an incentive to read, giving students the self-governance to choose from nearly 1,000 titles and to set their own purpose for reading in a competitive spirit to score points. Allowing more self-control over one's reading environment motivates students to read (Hunt, 1990: 13).

Another source, Burgess (1985), attempted to modify the leisure reading habits of students who read little at home. A behavior modification plan included a home reading program monitored with parent cooperation and rewarded with token prizes to lead students to the intrinsic pleasure of reading. Initially motivated by prize offerings, students eventually selected books by certain authors and developed preferences in writing styles. Burgess predicted that students would become increasingly aware of their literary interests and find significant rewards in reading, beyond the "artificial reinforcers" (1985: 848).

In addition to tangible incentives, giving praise is also advocated. "Perhaps the most important factor in the process of motivating children to read for pleasure is the teacher" (Perez, 1986: 9). Another proponent of creative reading incentive programs, Howard (1988), stressed the value of positive feedback to stimulate poor readers to read more. Of course, one cannot discount the importance that grades and teachers' expectations have on many students. These expectations, as well as the various motivational strategies cited above, are all extrinsic. Someone is motivating, prodding, or rewarding the student. What is eventually sought is the student who finds the intrinsic pleasure or benefit one can derive from reading. From such an ideal, one might wish to consider the assessment of reading achievement to be more longitudinal; that is, eventually witnessing former reading students reading as adults. Wouldn't this be a better assessment of reading achievement--adults continuing to read books and other print material for pleasure and intellectual growth? Until that time, and for the purpose of this project, the writer has attempted to improve the reading achievement of the students identified as underachieving on the Comprehensive Test of Basic Skills.

Proposal Solution Components

After reviewing the literature and interviewing knowledgeable others, several solution strategies were identified for improving the reading comprehension achievement of the identified underachievers. Perhaps the most salient solution was to increase students' reading. Howard (1988), Harris and Sipay (1980), Trelease (1989) and others advocated increased reading as a means toward improving one's achievement. As suggested by Carbo (1987), Lesesne (1991), and Anderson, Wilson and Fielding (1986), time would be provided to read during the school day. In this solution strategy, teachers scheduled a minimum of one hour per week for sustained silent reading (SSR) in school.

Considering Perez's (1986) suggestion to help children plan specific time for reading at home, a second related strategy incorporated a student-teacher-parent contract (see Appendix F). Parents were asked, via this contract, to provide an additional hour per week of reading at home. A similar contract approach initiated by Burgess (1985) met with much success in increasing children's reading frequency and positive attitudes. A weekly minimum of two hours of scheduled free reading was planned as a result of these strategies, and, as a youngster became engrossed in a self-selected story, it was possible additional time was spent reading.

P. R. Crook (personal communication, August 23, 1991), in agreement with the literature review (Flood & Lapp, 1990; Tunnell, 1989; and Perez, 1986), emphasized the importance of allowing children to select their own materials. E. Goodin (personal communication, August 22, 1991) concurred, stressing the value of children feeling ownership of their reading selections. To insure easy accessibility of a wide range of reading materials, a third solution strategy involved promoting use of the school and public libraries. A visit to the public library was planned for all sixth, seventh, and eighth grade students in the fall of 1991. Through this walking field trip to the local branch of the county library, students had the opportunity to register as card holders if they were not currently library members. This public library orientation session was designed not only to introduce newcomers to the facility's offerings, but also to stimulate usage by current members. Through this strategy and the home reading contract, the identified underachievers were encouraged to read more outside the school. Parents would hopefully, as Lamme (1980) suggested, support visits to the public library and provide a quiet time regularly for all family members to read.

The school's library encouraged increased student patronage also. With the addition of two computers and a new computerized reading program beginning September 1991, students were motivated to visit and use school library resources. Howard (1988: 44) supported the use of creative reading incentive programs that "incorporate realistic goals, interesting milestones, and simple satisfying rewards." Introducing the Accelerated Reader program as a fourth solution strategy promised to do all of the above while generating interest in reading. Through this reading incentive program, students chose from hundreds of fiction titles, encompassing reading levels from first to twelfth grade. This allowed students at all ability levels to select a book and read with a high probability of understanding and success. As soon as the student completed the book, he/she self-tested with the aid of the computer and was awarded points for correct responses to questions about the selection.

Chall (1983) suggested a need for materials that offer immediate reinforcement. As students accumulated points, their efforts were recognized by the teacher and the librarian with pizza and ice cream parties for top scorers, small tangible rewards for individual successes, or simply teacher praise, a vital factor in creating positive reading attitudes, according to Perez (1986) and Howard (1988). Burgess (1985) suggested token reinforcers can initially serve as extrinsic rewards. Hopefully, tangible rewards lead to an eventual intrinsic love for reading (B. A. Lehman, personal communication, August 28, 1991). Indeed, Roland (1990) lauded the Accelerated Reader program for stimulating a desire to read for pleasure, evidenced by the increase in library book circulation, as well as the observation that more students were reading and discussing their selections. The program, while providing a controlled means of assessment, offered an ever-expanding choice of books to read. Supplemental disks added to the program allowed students to choose from nearly 1,000 titles. Swift (1993: 366), speaking to the benefits of choice, noted that "each of us creates meaning through our own interaction with text." Swift was a strong proponent for allowing students to choose books to read and giving them time to read in class.

Introducing a reading incentive program such as Accelerated Reader positively impacted Franklin's sustained silent reading (SSR) program, a previously cited strategy. Students had a purpose and incentive to read. Such motivation inspires one to put forth more effort (Harris & Sipay, 1980). However, the most important motivating factor for sustained silent reading, as well as any classroom activity is the teacher (Perez, 1986; Anderson, Wilson, &

Fielding, 1986; Lesesne, 1991). As a fifth solution strategy, the teacher and the parent were encouraged to serve as role models, reading independently for pleasure. Smith (1989: 357) stated, "Children learn from what they see us doing." Unfortunately, children may never see reading role models at home so, as Erazmus (1987) asserted, it is imperative for teachers to take responsibility in showing children the importance and pleasure of reading. Practicing sustained silent reading with their students, teachers demonstrated their personal belief that reading is enjoyable and important. Reading aloud to students also provided an opportunity to promote reading in a personal, pleasurable way. Advocated by Perez (1986) and Erazmus (1987), such a solution strategy as reading aloud breathes life into printed words, giving books an added dimension, a voice.

Another solution strategy offered some of the identified underachievers an opportunity to give their voice to a story by reading orally to a younger grade level. Heathington and Alexander (1984), as well as Lamme (1980), pointed out the value of reading to younger children. This organized read-aloud program was planned and directed by the guidance counselor during the 1991-1992 school year and sponsored by the school librarian during 1992-1993. It was hoped student participants were supported at home as they practiced sharing their book selections with younger siblings or other family members.

Further opportunities for reading occurred in the classroom as teachers expanded the literature-based reading instruction program. This solution strategy provided at least one new novel per grade level and appropriate supportive materials for the 1991-1992 school year. Additional materials were purchased in 1992-1993 to expand the choice of titles. As promoted by Larrick (1987), Tunnell (1989), Harste (1985), and Howard (1980), using novels adds meaning to skills instruction and encourages critical thinking and discussion.

Finally, noting the importance of teacher input, as well as professional development (Lohr, 1987; Larrick, 1987; Chall et al., 1990; and Harste, 1985), a reading committee, including teachers and administrators, met regularly to discuss ways to enhance instruction and acquire appropriate materials and professional support. An in-service activity was planned for January 1992, on whole language, addressing the integration of reading and writing and the use of trade books in the reading program. Another in-service seminar, scheduled for October 1991 with Jack Canfield, focused on self-esteem in the classroom. Although, intended for all grade levels, techniques suggested by Canfield were applicable to the identified underachievers in reading. As Howard (1988: 48) suggested in a strategy to reach deficient readers, we must "create a school climate in which self-esteem can grow." Positive attitudes can have a substantial impact on reading achievement (Hall, 1978; Bruneau, 1986).

Project Outcomes

The outcomes for this project consisted of both terminal and process objectives. The terminal objectives related specifically to improving reading comprehension achievement in sixth, seventh, and eighth grades, for 54 students identified as not reaching their anticipated ability level. At the start of the 1991-1992 school year, six of the students identified from the Spring 1991 test results had moved out-of-district or been placed in special education programs. Specifically, there were 24 identified students in sixth grade, 12 students in seventh grade, and 12 students in eighth grade for a total of 48 identified students. Data collected for students previously in this study will remain in the records of the final report with reasons for student deletions noted where appropriate.

Terminal objective 1: All the 24 identified 1991-1992 sixth graders having a reading comprehension score on the Comprehensive Test of Basic Skills (CTBS) lower than their predicted score on the Cognitive Test of Skills (CTS) will obtain their anticipated achievement as measured on the CTBS by April 1993.

Terminal objective 2: All the 12 identified 1991-1992 seventh grade students having a reading comprehension score on the CTBS lower than their predicted score on the CTS will obtain their anticipated achievement as measured on the CTBS by April 1993.

Terminal objective 3: All the 12 identified 1991-1992 eighth grade students having a reading comprehension score on the CTBS lower than their predicted score on the CTS will obtain their anticipated achievement as measured on the CTBS by April 1992.

Terminal objectives 4, 5, and 6 were related to positively increasing the identified students' attitudes toward reading, as measured by the Estes Survey of Reading Attitude.

Terminal Objective 4: By comparing the scores of the Estes Reading Survey administered to the identified sixth grade students in September 1991 with scores obtained in May 1992 and/or January 1993, a mean increase of at least 0.25 points in positive attitude toward reading will be observed.

Terminal Objective 5: By comparing the scores of the Estes Reading Survey administered to the identified seventh grade students in September 1991 with scores obtained in May 1992 and/or January 1993, a mean increase of at least 0.25 points in positive attitude toward reading will be observed.

Terminal Objective 6: By comparing the scores of the Estes Reading Survey administered to the identified eighth grade students in September 1991 with scores obtained in May 1992, a mean increase of at least 0.25 points in positive attitude will be observed.

To obtain these outcomes, the following process objectives were initiated. As a review of the literature indicated and the probable causes stated, to increase reading achievement, the manager focused on: (a) the value of reading frequently, (b) the impact of student attitude, (c) the importance of role-modeling and providing opportunities to read, (d) the influence of family background, and (e) the significance of motivation and incentives for reading. These five above areas of concern were often considered collectively as the process objectives were developed.

Process Objective 1: Through a planned program of sustained silent reading and the incentive to read fostered by the Accelerated Reader computerized literature program, the identified students will read at least 10 self-selected fiction books during the 1991-1992 school year as reported on the May 1992 Student Reading Survey.

Process Objective 2: Library circulation statistics for the period of March 1992 through May 1992 will show a 50% increase of fiction books borrowed by students in Grades Six through Eight, as compared to the period from March 1991 through May 1991.

Process Objective 3: All of the identified students, not previously card holders, will become members of the public library, upon parental approval.

Process Objective 4: Guided by the librarian, classroom teacher, and guidance counselor in the use of the Accelerated Reader program, all identified students will experience success associated with reading as measured by the extrinsic reward of scoring points on the computer showing reading comprehension of self-selected books.

Process Objective 5: Beginning in September 1991, all teachers will conduct a sustained silent reading program (SSR) for a minimum of one hour per week.

Process Objective 6: During the 1991-1992 school year, at least one new novel will be added to the reading curriculum for each level, Grades Six through Eight.

Process Objective 7: Introducing a student-teacher-parent contract for the 1991-1992 school year, all identified students will sign this agreement, with parent approval, to increase reading outside of school.

Process Objective 8: A "read aloud" program will be instituted, offering readers in Grades Six through Eight the opportunity to plan and present a reading selection to younger students. Under the direction of the guidance counselor, the 10 students who have the greatest discrepancy between anticipated and actual achievement will be among the participants in this program.

Side Effects

Anticipated side effects resulting from this project proved to be very desirable. Foremost was the probability that all students in Grades Six through Eight would increase their consumption of reading material as evidenced by library circulation statistics and time observed reading. All of the students were given a minimum of one hour per week of free reading (SSR) and all students were asked to sign the home reading contract.

Another positive side effect that occurred was the positive modeling older students provided younger students. As older students engaged in reading and related motivational activities, their enthusiasm influenced younger schoolmates and siblings. All students in Grades Three and above participated in SSR and many looked forward to trying Accelerated Reader once they reached fifth grade. Students in third grade and above were invited to participate in the home-school reading contract. The read-aloud program provided an opportunity for direct role modeling as older students presented a planned reading presentation. Responses on questionnaires completed after each session indicated all readers enjoyed receptive audiences. Perhaps such an experience might have even inspired one of our sixth through eighth graders to pursue teaching as a vocation.

Although the public library did not delineate circulation or usage statistics by age, the staff did observe an increase in student patronage. Indeed, student overdues rose in 1991-1992, according to library staff. The interaction between students and the library as part of the library card membership drive hopefully motivated these same students to utilize the public library for ongoing research, such as the annual science and history projects required during the school year. Ideally, this promotion of the public library may encourage lifelong use.

A final positive side effect which did result from this project was the increased dialogue between teachers in the upper grades and the librarian as they cooperated and conferred among themselves to purchase novels and schedule class activities such as Accelerated Reader assessments and free reading time. Teachers reorganized previously scheduled activity/study periods to accommodate some of these plans.

As well as positive side effects, there was a risk of negative side effects occurring. Some students who have difficulty reading may have felt inadequate as they witnessed other students continuously reading books and receiving recognition. For example, the Accelerated

Reader program identified outstanding readers. However, if a youngster read a book and failed the assessment, he/she may have become discouraged from trying another book. The reading teachers and librarian, working closely together on this project in 1992-1993, were aware of this potential problem and took care to direct specific students to choose Accelerated Reader books appropriate to their reading level. Students may have also experienced tension from competing interests; namely, pleasure reading on one hand and required work in additional subject areas on the other. However, it was hoped such a dilemma might be resolved by sacrificing some other time-consuming activity, such as watching television.

In proposing this project, there was some concern that teachers would give less than their enthusiastic effort if they perceived this infusion of reading activities as unimportant, or conflicting with their agenda. Such feelings could have resulted in morale problems. However, the Accelerated Reader program proved quite popular from its onset and many teachers wanted to participate with the students, scoring points for books they read. Many teachers also remarked positively about the silent sustained reading program and the selection of new novels for classroom use.

In spite of these possible side effects, or perhaps because of some, the goals of Franklin Elementary School were impacted. As cited previously, one of the 1991-1992 district objectives was closely linked to raising reading achievement. As the project manager attempted to improve the reading comprehension of the 48 identified underachievers in the 1991-1992 sixth, seventh, and eighth grades, reading achievement for every Franklin student was emphasized.

The importance of reading was hopefully recognized by all Franklin students and teachers, as well as family members and others outside the school setting. Though immeasurable within the scope of this project, the ultimate goal was to develop a community of lifelong readers.

Chapter 5

Implementation History

Original Action Plan

To realize the objectives as outlined in Chapter 4, namely: (a) increasing reading comprehension achievement for identified students in Grades Six, Seven, and Eight, and (b) improving the same students' attitudes regarding reading, several strategies were employed throughout this project. These activities were designed to address both achievement and attitude simultaneously. The specific strategies included: (a) regular and frequent silent sustained reading in the classroom, (b) introduction of novels in classroom instruction, (c) participation in Accelerated Reader program, (d) membership in the local public library, (e) promotion of reading outside the school day via a student-teacher-parent contract, and (f) involvement in a read-aloud program.

Chronology of Implementation Activities

The strategies noted above were implemented in response to the April 1991 standardized test results. Specifically, 54 fifth, sixth, and seventh graders were identified as underachieving with regard to reading comprehension. The Comprehensive Test of Basic Skills (CTBS) was used to measure reading comprehension achievement and the Test of Cognitive Skills (TCS), an aptitude test correlated to the CTBS, was used to determine the anticipated reading comprehension achievement of these students.

After analyzing the results of these tests, the superintendent began to initiate several strategies to address the disparity of actual achievement and anticipated achievement with regard to reading comprehension for the identified underachievers specifically. As a side effect, the strategies employed would impact, in most cases, all students in the upper grades. In May 1991, the Accelerated Reader program, two Apple IIE computers, and a printer were purchased. The Accelerated Reader program is a computer software package enabling students to assess their understanding of a book by self-administration of a short multiple choice test. Students may select any book on the Accelerated Reader list, which includes nearly 1,000 titles of children's/young adult literature. Most of these titles were available to Franklin students through an extensive collection in the school library and through the county library system, which had a branch within a half mile of the school. From May 1991 through June 1991, the librarian and teachers in the upper grades were encouraged to familiarize themselves with this program.

In August 1991, the librarian and several teachers volunteered their time to place a red dot on the spines of books in the school library which were included on the Accelerated Reader list. These red dots would facilitate the Accelerated Reader program by gaining students' attention when they were looking for books to borrow.

In September 1991, the librarian instructed all fifth, sixth, seventh, and eighth graders and their teachers in the use of the Accelerated Reader program. Teachers were thoroughly oriented to the management component of Accelerated Reader by the librarian. As stated above, the program enables students to select a book of their choice and then assess their understanding of that book. If a student answers all of the questions correctly, he/she scores the maximum points allowed for that book. If a student scores correctly 60% or more of the test items, he/she earns a proportion of points allowed for that book. If a students does not achieve a 60% rate of correct response, no points are awarded and the student may not retest on that same title unless the teacher specifically allows the student entry into the program for a retest. Also, as the readability level of the books increase, the point value rises. For instance, Gone with the Wind is worth 69 points, while Charlotte's Web is worth 5 points. It was soon discovered by participants that reading abstracts of a book or viewing a movie adaptation did not yield successful results. Students could not achieve success in Accelerated Reader unless they had carefully read the entire book on which they were testing. Many of the teachers began reading the young adult literature and taking the assessments also.

In January 1992, any student who had earned 50 or more Accelerated Reader points was treated to a pizza party in the library. Those who scored 100 or more points by May 1992 were again so recognized. The librarian also rewarded a pencil or bookmark to any student whenever a perfect score on a test was earned. Students who earned more than 20 points were cited on a bulletin board in the main hallway outside the library and continual progress was tracked for passersby.

In June 1992, the names of the top scorer in fifth, sixth, seventh, and eighth grade were etched into a permanent plaque outside the library. This plaque was designed to add names for the 1992-1993 school year and for each of the next 10 years.

In September 1992, the Accelerated Reader program continued for students in Grades Five through Eight. Although the 1991-1992 identified eighth graders had graduated, the identified students from the previous year's sixth and seventh grade continued in this program with all Franklin fifth through eighth grade students. In January 1993, another pizza party was provided to recognize successful participation in the Accelerated Reader Program as defined by scoring 50 points or more.

To gain support for the Accelerated Reader program, the Home School Association (HSA) was approached. The HSA provided financial support and encouragement for the school's involvement in this program. Specifically, the HSA purchased a second set of computer disks, a $500 expenditure, motivational prizes (e.g., pencils, certificates), and was supportive with the entire concept of increased reading. This support grew. In October 1992, another updated set of Accelerated Reader program disks was purchased through a community service club, the Columbiettes, the contact person being involved with the HSA. The excitement generated from this Accelerated Reader program was substantial, as evidenced by teacher participation, HSA support, and library usage by students.

Another strategy to increase reading comprehension and improve attitude toward reading was to introduce high interest contemporary novels to the sixth, seventh, and eighth graders. To this end, selected teachers, the principal, and the manager met as a reading curriculum committee. One charge of this committee was to identify novels for use in the classrooms. Using the whole book, rather than excerpts from basals, was intended to increase students' appreciation for reading and provide greater opportunities for critical thinking and discussion. In November 1991, the committee surveyed teachers and proposed the purchase of four more novels per grade level. These novels included:

Grade Six: Bridge to Teribithia
From the Mixed-Up Files of Mrs. Basil E. Frankweiler
Indian in the Cupboard
Return of the Indian

Grade Seven: The Endless Steppe
Hatchet
It's Like This, Cat
Maniac Magee

Grade Eight: The Contender
The Diary of Anne Frank
Johnny Tremain
A Wrinkle in Time

The teachers were interested in providing students with a mix of literature, as well as integrating other subject areas into the reading curriculum (e.g. supporting the eighth grade social studies curriculum with Johnny Tremain).

In December 1992, the reading teachers in seventh and eighth grades requested additional novels to be used in their classrooms. These new novels included:

Grade Seven: The Cay
The Door in the Wall
The Lion, the Witch, and the Wardrobe
The Mystery of Drear House
Taking Terri Mueller

Grade Eight: A Christmas Carol

Teachers shared the novels with various strategies as a result of whole class and small group participation. For instance, class discussions, student writings, quizzes, and oral readings from the novel were utilized.

Another charge of the reading committee was to promote reading beyond the school day. Of interest to the manager of this project was the increased frequency of reading. Proposed by the manager, a student-teacher-parent reading contract was reviewed and adopted by the reading committee. This contract was intended to garner parent support for reading at home. Appendix F depicts the contract that was devised to accomplish this objective. All students from Grades Three through Eight were encouraged to participate. Unfortunately, this activity did not produce a measurable outcome in that there was no way to determine if students were actively and regularly involved in reading at home for the 1991-1992 school year. It did raise the awareness of parents for the desire to promote reading at home. However, given the absence of follow-up, it was impossible to determine the effectiveness of this program. As a result of this finding, the 1992-1993 school year continued with a student-teacher-parent contract program. However, this 1992-1993 contract included a coupon page, requiring the student's, parent's, and teacher's signature. With verification that the contract was upheld, students could submit the coupon for a lunchtime treat at the end of each month. Such treats included soft pretzels, ice cream, or other lunchroom snacks. The purpose for the coupons was two-fold. First, the coupon provided a means to track students who appeared to have parent support for their independent reading at home. This premise assumes that the student and parent were honest in verifying the required time for reading. Second, the coupon served as a way to recognize and reward students for their effort and discipline to read independently at home. As a side effect, publicity of the contract opportunity served to heighten community awareness of the importance of reading and provided participating students with a year-long incentive.

An activity to increase the frequency of reading within the school week was also undertaken. In September 1991, the principal and the manager met to arrange for silent sustained reading (SSR) throughout the school for a minimum of one hour per week. It was decided that at the first faculty meeting, the principal would address and direct teachers to plan for SSR for a minimum of 15 minutes to a maximum of 30 minutes in any given day, totaling at least one hour per week. Each teacher would be required to highlight in their plan books this SSR time. Further, teachers would be encouraged to model reading at this time, also. Many teachers accepted this new request with enthusiasm. It was believed that the SSR program was important to the overall reading program, and would support the Accelerated Reader program in the upper grades. The SSR program appeared to be quite successful for many students. For example, many of the seventh and eighth grade students expressed an eagerness for SSR after a few months into the program. Indeed, they expressed disappointment when SSR was missed due to a schedule conflict.

Another encouraging comment was passed unsolicited by a parent while attending the superintendent's parent advisory committee meeting. That parent stated, "My son started reading Babe Ruth in school and wouldn't put it down that night until he finished." This comment was in reference to the SSR program. Of course, not every student had the same motivation or desire to read silently. However, few discipline problems were referred during SSR. This activity continued into the 1992-1993 school year. Although the principalship changed hands in this new year, the current principal endorsed the SSR program.

In September 1991, another strategy was engaged. All students in Grades Six, Seven, and Eight were escorted to the Sussex County Library, Franklin branch, as part of a membership drive and orientation to the public library. In July 1991, the principal and the manager met with Franklin Public Library's head librarian to arrange these walking field trips. The anticipated outcomes resulted in students joining the public library, becoming better acquainted with the public library staff and resources, and, as a result, being more inclined to avail themselves of the facility, not only for pleasure reading, but also for research purposes. Following the field trips, all but one of the identified underachievers were members of the public library. The one student who did not become a member was not permitted to join by the parent. As minors, the students needed to obtain parental permission to join the library. The high membership of identified students appeared to reinforce the success of the membership drive and this field trip activity.

The 10 students who were identified as having the greatest discrepancy between their anticipated and actual achievement in reading comprehension were encouraged to participate in a read-aloud program. Specifically, in December 1991, the guidance counselor approached these students to obtain their support and involvement in reading to younger students. The guidance counselor scheduled convenient times, approximately once a week, for the identified students to go to the younger students' classrooms to read with a single student or group, dependent on the teacher's needs or wishes. This activity was voluntary on the part of the student readers. Further, to add to the importance placed on the readers' efforts, the manager met with the group and shared some ideas and strategies about reading aloud to younger children. For this initiation activity, the manager read to the group The Potato Man. He discussed the importance of reading the material prior to meeting with an audience, using expression, showing pictures, asking questions to keep young children focused, and showing enthusiasm and dramatic flair. Students who participated in the read-aloud program were asked to complete forms about their reading experiences. See Appendix G for an example of this form.

In June 1991, those students who participated in the read-aloud program were recognized with an end-of-the-year ice cream party. In September 1992, this read-aloud activity continued, now under the immediate direction of the librarian. This change occurred due to the major shift in responsibilities of the guidance counselor as a result of the elimination of the vice principal position. This action occurred when a reduction in force (RIF) was necessary because of budget constraints. While several of the participating students withdrew from the read-aloud program during the second year, other students outside the group of identified underachievers quickly volunteered. Although this change was not expected, the activity appeared to help the younger students and their teachers and provided an opportunity for other older students to share their talents. Prior to the implementation of this activity during the 1992-1993 school year, the manager, again, met with the readers. During this meeting, the manager modeled oral reading by reading to the group The Three Brothers.

In addition to the activities cited above which engaged students, several other strategies were implemented to sensitize teachers and promote their development and professional growth. During the time frame of this project, September 1991 through January 1993, teachers participated in total faculty in-service sessions as well as individual workshops related to reading and/or student achievement. The following activities depict the workshops provided:

On October 14, 1991, all teachers attended a full day self-esteem workshop, led by Jack Canfield, President of Self-Esteem Seminars. The purpose of this workshop was to sensitize teachers to the relationship between achievement and self-esteem. Teachers were encouraged to promote students' worth by recognizing their students' positive behaviors and efforts. Several activities and anecdotal stories were employed to emphasize this premise.

On March 18, 1992, the total faculty participated in a half-day workshop promoting the importance of the whole language experience in the reading curriculum. Specifically, ideas shared by Connie Kehoe of Connie Kehoe Associates included experiencing language and integrating writing, reading, and oral expression. Developing and writing story lines were also suggested as important opportunities to strengthen reading skills. This program was based on the New Zealand model of a balanced literacy approach. Unfortunately, this program was geared more to teachers of younger students, as suggested by many of the materials displayed.

Another full faculty workshop was held on September 24, 1992. At this half-day session, the faculty was divided into two groups, one of primary teachers and one of upper grade teachers. Two presenters, Cheryl Stroud and Joelle Murphy, from the Writing Project at Teachers' College, Columbia University addressed the groups regarding the importance of integrating language arts skills. The speakers provided the teachers with appropriate activities to engage children in writing as well as developing language. The presenters also modeled reading to the staff and demonstrated reading and writing activities.

On October 14, 1992, a fourth full faculty in-service program was convened. This program was designed to improve student achievement through motivational techniques. Edward Agresta, teacher, coach, and motivational speaker, shared ideas with faculty to underscore the importance teachers play in the lives of students. He further emphasized the importance of teaching and the high standards and support teachers should provide students. Much of this presentation was reinforcement of the Canfield presentation a year earlier.

In addition to these programs, individual teachers were encouraged to attend other workshops outside the school district or visit other teachers. Some teachers of the identified students attended the following out-of-district workshops:

January 1993 - Inclusion Techniques - Cooperative Learning
December 1992 - Language Arts Workshop
December 1992 - Whole Language Transition Workshop
November 1992 - Books and Beyond workshop
June 1992 - Academy for the Advancement of Teaching
June 1992 - Self-Esteem and Peak Performance for Women
April 1992 - 18th Annual Whole Language Development Education Conference
March 1992 - Halloran Reading Workshop

These cited workshops, related to student achievement and reading/language arts, contributed to the teachers' professional growth and/or repertoire of instructional methods.

These opportunities were encouraged to provide teachers with in-service training and to support their efforts in working with their students.

The implementation strategies for this project included evaluation procedures of two types, measuring achievement and attitude. With regard to achievement, the Comprehensive Test of Basic Skills (CTBS) was utilized. Related to achievement, specifically anticipated achievement, was the Test of Cognitive Skills (TCS), which was administered in Grades Five and Seven at the same time the CTBS was given. These tests were used in April 1991 to identify the students who underachieved in reading comprehension. For the identified 1991-1992 seventh grade students, the TCS scores were used from the April 1990 test administration when the youngsters were in fifth grade. This was necessary because the TCS was only administered in Grades Five and Seven.

In April 1992, all of the originally identified students then in Grades Six, Seven, and Eight, and their classmates were administered the CTBS, and those then in Grade Seven received the TCS. The scores for the identified underachievers were analyzed to compare reading comprehension from the previous year. For the sixth and seventh grade students in 1992, these scores served as another benchmark for this two-year project. These 1992 achievement scores were compared to the April 1993 CTBS and TCS scores. For the eighth grade students in 1992, their scores served as a final result for this project. Analysis of the achievement test scores is provided in Chapter 6, Results.

Student attitude was assessed using two different measures. The Estes Reading Survey was used to assess the identified students' attitudes toward reading. This measure is a five-point Likert-type scale requiring a student to respond from strong agreement to strong disagreement regarding fifteen items. In September 1991, this survey was first administered and served as a database for the post administration of the Estes survey in May 1992 and again in January 1993.

Another assessment intended to reveal student behavior and attitude toward reading was a questionnaire developed by the manager. In May 1991, all of the students in fifth, sixth, and seventh grades were surveyed using this instrument. See Appendix C for the survey. In May 1992, those students who were identified as underachievers were surveyed again. Unfortunately, these May 1992 results could not be compared to the May 1991 results in an isomorphic manner due to the inability to identify respondents on the May 1991 instrument.

Finally, the teachers were surveyed with regard to their perception of student/ classroom reading. Appendix E depicts the survey questions and results. In May 1991, teachers were asked to complete this Likert-type questionnaire. Although this survey did not isolate the underachieving students, it did provide an opportunity to gain some perspective about teacher attitude toward reading and, perhaps, sensitize teachers to this reading project.

Summary of Accomplishments

Throughout the implementation of the aforementioned strategies, several accomplishments were realized. These accomplishments revolved around the activities which were designed to address the reading comprehension needs of the identified underachieving students and were applied to all students in the sixth, seventh, and eighth grades. The library program was upgraded with new purchases of books, software, and computers. Circulation increased and students and teachers began a new, enthusiastic relationship with the library as the Accelerated Reader program was introduced.

Silent sustained reading (SSR) became a weekly, if not daily, staple in the curriculum throughout the school. Comments from teachers, students, and parents overwhelmingly supported this activity. Some teachers would extend SSR time for rewarding good behavior and accomplishments by students.

Reading awareness was increased through many surveys, as well as other forms of communication, and through extrinsic rewards for reading. Pizza parties and ice cream treats were provided to those students who met goals. The Home School Association (HSA) became involved in this promotion of reading, contributing financial support and encouragement. The superintendent promoted the importance of reading through several articles in the school newspaper. The reading contract between home and school, although less successful than hoped for students in Grades Six through Eight, did generate some interest for students in Grades Three through Five. Hopefully, this phenomenon will be carried forward or at least serve as a springboard for better reading comprehension as the younger students enter the middle grades.

Teachers in the upper grades and the reading committee focused on the materials used to promote and teach reading. Much excitement was generated when teachers began to realize that new novels of their choosing would be purchased to supplement the basal readers. In fact, instruction via the basal was substantially diminished by the novel approach in seventh and eighth grades.

Several in-service programs were offered to the faculty. These addressed the integrated approach to whole language in the instruction of reading, the relationship between achievement and self-esteem and motivation, and the importance teachers play in motivating students and enhancing their esteem. Individual teachers were encouraged to attend workshops outside the district with regard to reading. It appeared reading was being discussed and considered by teachers and students alike, in a more prominent manner. Some students actually engaged in book discussions with one another without teacher prompting. Reading assumed a vitality and prominence that was not apparent prior to this project.

Chapter 6

Evaluation of Results and Processes

Project Outcomes and Processes Used

The outcomes for this project concerned reading comprehension scores for the 1991-1992 sixth, seventh, and eighth grade students who were identified as underachievers, using the Comprehensive Test of Basic Skills (CTBS) and the Test of Cognitive Skills (TCS). These students were grouped by grade level, and a discrete terminal objective was written for each group. Hence, terminal objective 1 proposed the underachieving sixth graders would achieve their anticipated reading comprehension score. Terminal objectives 2 and 3 proposed anticipated reading comprehension scores would be achieved by seventh and eighth graders, respectively. Terminal objectives 1 and 2 for the sixth and seventh graders had the benefit of an additional year of treatment beyond that of objective 3 for the eighth graders who graduated in June 1992.

Three additional and distinct terminal objectives concerned improving student attitude toward reading. Similar to objectives 1, 2, and 3, terminal objectives 4, 5, and 6 targeted the attitudes of sixth, seventh, and eighth grade underachievers, respectively. These objectives proposed the identified students would realize a positive gain in attitude. Specifically, using the Estes Reading Survey for pre- and post-assessments, a mean increase of at least 0.25 points in positive attitude toward reading would be observed. This survey used a Likert-type scale with responses ranging from 1 to 5. For the eighth graders addressed by objective 6, the mean increase was anticipated by May 1992, given their June 1992 graduation exiting these students from the project. The 0.25 point mean gain for students in Grades Six and Seven, addressed by objectives 4 and 5, could be attained by January 1993, as these students continued in the project into the 1992-1993 school year.

Table 10 depicts the results for the identified eighth grade underachievers with regard to their respective reading comprehension achievement scores. As proposed in terminal objective 3, all twelve eighth grade students surviving this project were to obtain their anticipated achievement. As previously noted, national percentile scores were converted to normal curve equivalent (NCE) scores to allow for comparison. On the April 1992 CTBS, 8 of the 12 surviving students, or 66%, met or exceeded their anticipated reading comprehension scores, as predicted on the April 1991 TCS.

Table 10

Comparison of Eighth Grade Reading Achievement Using CTBS and TCS Scores, 1991-1992

Student #	Met objective	1992 NCE	1991 ANCE	1991 NCE	Dif[a]
801		41.3	41.9	41.3	0.0
802		44.7	45.2	40.7	4.0
803	X	78.2	70.9	58.7	19.5
804	---	Moved	56.4	46.8	---
805	X	61.7	58.7	54.2	7.5
806	X	70.9	63.5	61.0	9.9
807	X	82.7	74.7	59.3	23.4
808	X	45.8	41.9	38.3	7.5
809	X	41.3	41.3	30.7	10.6
810	X	70.9	55.9	45.2	25.7
811		29.9	62.9	43.0	-13.1
812		33.7	49.5	15.4	18.3
813	X	55.3	49.5	45.8	9.5
Total difference between 1991-1992 NCE scores					122.8
Mean difference					10.2

Note. If the 1992 NCE met or exceeded the 1991 ANCE, the student met the objective. NCE = Normal curve equivalent score on CTBS reading comprehension subtest. ANCE = Anticipated score on CTBS reading comprehension subtest. [a]Dif = Difference between 1992 and 1991 NCE scores.

Analysis beyond the parameters of the terminal objective revealed an overall rise in the identified eighth graders' reading comprehension scores. Ten of the 12 students demonstrated gains in reading comprehension between the 1991 and 1992 administration of the CTBS. The average gain for all 12 underachievers equaled 10.2 NCE points. The terminal objective was only partially met in that not every student realized their anticipated reading comprehension score, but the overall rise in the identified eighth graders' reading achievement on the CTBS was noteworthy.

Regarding terminal objective 6, an increase in positive attitude for the eighth grade underachievers was observed by comparing the scores on the Estes Reading Survey administered in September 1991 with scores obtained in May 1992. Specifically, a mean increase of at least 0.25 points in positive attitude was expected. The mean score in September 1991 equaled 3.30. The mean score in May 1992 equaled 3.68. Indeed, the mean increased 0.38 points, exceeding the proposed 0.25 points. However, this statistic tells only part of the story. Table 11 illustrates each underachieving eighth grader's Estes scores, indicating the individuals who did show a positive gain in attitude.

These data show 5 of the 12 individual students met or exceeded the proposed 0.25 mean increase in attitude. Three other students achieved an increase in positive attitude, albeit this gain was slightly more modest. Of the four individuals who reported a decrease in positive attitude, it is interesting to note that two students (801 and 812) did not meet their anticipated reading comprehension achievement score, as depicted in Table 10. However, student 802 who showed the greatest improvement in positive attitude, gaining 2.60 points on the Estes five-point scale, did not meet the anticipated score on the CTBS. Therefore, given the data from this small sample size, it is difficult to identify any relationships, let alone draw any conclusions, with regard to cause and effect.

Table 11

Comparison of Eighth Grade Students' Estes Reading Survey Scores, 1991-1992

Student #	Mean Scores on Estes Survey		Dif[a]
	1992	1991	
801	3.33	4.07	- .74
802	3.93	1.33	2.60
803	3.93	3.87	.06
804	---	Moved	---
805	4.80	3.33	1.47
806	3.07	3.20	- .13
807	3.40	3.73	- .33
808	2.73	1.87	.86
809	4.07	3.87	.20
810	4.07	3.40	.67
811	3.13	2.67	.46
812	3.33	4.00	- .67
813	4.33	4.20	.13
Total difference between 1992-1991 Estes Survey scores			4.58
Mean difference			.38

[a]Dif = Difference between May 1992 and September 1991 Estes Survey results.

Terminal objective 1 addressed the 1991-1992 sixth graders who were identified as underachievers in reading comprehension. Table 12 depicts individual students' reading scores from the CTBS and TCS assessments (1991-1993). Twelve of the 23 sixth graders, or 52% of the originally targeted group who remained in the district, met objective 1 by reaching or exceeding their 1991 anticipated reading comprehension score on their April 1993 reading comprehension achievement subtest. Conversely, 11 of the 23 students (48%) did not achieve this objective. It is noteworthy, however, that 78%, or 18 of the 23 pupils, demonstrated an increase in their reading comprehension NCE scores between April 1991 and April 1993, gaining a mean increase of 11.49 NCE points.

Table 12

Comparison of Sixth Grade Reading Achievement Using CTBS and TCS Scores, 1991-1993

Student	Met Objective	1993 ANCE	1993 NCE	1992 NCE	1991 ANCE	1991 NCE	Dif[a]
601	X	50.0	74.7	46.8	55.3	46.8	27.9
602		35.8	42.5	35.1	45.2	44.1	- 1.6
603		58.1	78.2	78.2	82.7	78.2	0.0
604	X	43.6	60.4	46.8	54.8	48.4	12.0
605	X	41.3	52.6	41.3	47.4	35.1	17.5
606	X	43.0	46.8	50.5	46.8	35.1	11.7
607	---	---	---	Moved	58.1	53.7	---
608		40.1	28.2	41.3	48.9	33.0	- 4.8
609		51.6	48.4	10.4	52.1	21.8	26.6
610		45.2	46.8	47.9	52.1	49.5	- 2.7
611	X	64.9	70.1	59.9	61.0	46.3	23.8
612	X	51.1	42.5	49.5	40.7	39.0	3.5
613		81.1	70.1	59.9	86.9	55.3	14.8
614		77.0	81.1	78.2	84.6	75.8	5.3
615		40.7	39.6	45.2	51.6	33.7	5.9
616	---	---	---	Moved	48.9	38.3	---
617	X	51.6	67.7	59.9	61.7	39.6	28.1
618	---	---	---	Moved	58.7	47.9	---
619		48.9	43.6	43.6	47.4	37.1	6.5
620	X	54.2	54.8	46.8	51.1	46.8	8.0
621	---	---	Moved	24.2	43.6	37.1	---
622		71.8	64.9	61.0	70.1	64.2	0.7
623	X	32.3	62.3	64.9	39.6	37.7	24.6
624	X	81.1	86.9	71.8	81.1	61.7	25.2
625		86.9	62.3	69.3	84.6	62.3	0.0
626	X	59.9	74.7	42.5	65.6	58.7	16.0
627	X	59.3	51.1	38.3	46.8	35.8	15.3
Total difference between 1993 and 1991 NCE scores							264.3
Mean difference							11.49

Note. If the student achieved their anticipated NCE score, the objective was met. ANCE = Anticipated NCE score on CTBS reading comprehension subtest. NCE = Normal curve equivalent score on CTBS reading comprehension subtest. [a] Dif = Difference between 1993 and 1991 NCE scores.

Although the Test of Cognitive Skills was administered to these students again in April 1993, generating a 1993 anticipated reading comprehension score, the original objective did not consider this projected statistic. The most recent anticipated score is, however, interesting to examine, and Table 12 provides these data. Comparing the 1993 anticipated (ANCE) and actual (NCE) achievement in reading comprehension, student improvement is greater than was encountered using the 1991 ANCE and 1993 NCE scores above. Specifically, although one student (612) who met the original objective would have been eliminated using the 1993 anticipated score, four other students (602, 603, 610, and 614) did meet their 1993 anticipated NCE score in reading comprehension. As a result, 14 of the 23 students, or 61%, met or exceeded their 1993 anticipated reading achievement scores.

Terminal objective 4 required the underachieving sixth graders to obtain a mean increase of at least 0.25 points on the Estes Reading Survey, measuring changes in attitude between September 1991 and May 1992 or January 1993. Table 13 shows the Estes Survey scores for each identified sixth grade student, comparing results from the three test administrations.

Only 10 of the 23 surviving sixth grade students showed a positive increase in reading attitude. The aggregate change in attitude represented a decrease between the 1991 and 1992, as well as the 1991 and 1993, survey administrations. Specifically, the discrepancy represented a mean difference of -0.25 points in 1992 and -0.34 points in 1993 compared to the 1991 Estes Reading Survey scores. Although these negative results were disconcerting, it is important to note, as Kerby (1986: 43) cautioned, "Results from attitude scales should be interpreted with care. Responses depend on how a student feels at a given time, on the manner in which the instrument is administered, and on the honesty of the answers."

The sixth grade students' overall decrease in positive attitude toward reading may have been influenced by several factors. The third and final test administration was scheduled for January 1993 when some individuals may have been affected by the proverbial winter doldrums. The repeated exercise of completing the survey three times within a 17-month period may have evoked a negative bias. Although testing was to occur in all reading classes with teachers following specific guidelines, there was little control over the individual testing

Table 13

Comparison of Sixth Grade Students' Estes Reading Survey Scores, 1991-1993

Student #	Mean Scores on Estes Survey			Dif[a]	Dif[b]
	1993	1992	1991		
601	1.87	3.07	N/A	N/A	N/A
602	1.47	2.27	2.27	- 0.80	0.0
603	3.40	3.60	3.13	0.27	0.47
604	3.93	3.53	4.27	- 0.34	- 0.74
605	2.00	1.60	2.80	- 0.80	- 1.20
606	2.87	3.33	3.53	- 0.66	- 0.20
607	---	Moved	---	---	---
608	2.87	3.20	3.00	- 0.13	- 0.20
609	2.15	3.08	4.07	- 1.92	- 0.99
610	2.60	3.47	3.36	- 0.76	0.11
611	3.80	4.40	4.00	- 0.20	0.40
612	3.93	4.33	2.67	1.26	1.66
613	4.20	3.87	3.80	0.40	0.07
614	4.53	3.60	2.07	2.46	1.53
615	2.87	2.27	3.13	- 0.26	- 0.86
616	Moved	---	---	---	---
617	3.60	3.07	2.87	0.73	0.20
618	Moved	---	---	---	---
619	3.53	3.93	3.53	0.0	0.40
620	1.53	1.27	4.27	- 2.74	- 3.00
621	Moved	3.07	4.57	---	- 1.50
622	3.13	2.67	4.00	- 0.87	- 1.33
623	1.60	2.20	2.93	- 1.33	- 0.73
624	4.20	4.27	4.00	0.20	0.27
625	3.60	4.33	4.00	- 0.40	0.33
626	2.20	3.07	3.80	- 1.60	- 0.73
627	1.07	1.00	1.00	0.07	0.0
Total difference between the Estes Survey scores				- 7.42	- 5.64
Mean difference				- 0.34	- 0.25

[a]Dif = Difference between the 1993 and 1991 Estes Survey results. [b]Dif = Difference between the 1992 and 1991 Estes Survey results.

situation and the exact protocol followed by each teacher. In retrospect, the initial Estes Survey scores may actually have been somewhat inflated. Prior to administering the surveys in September 1991, teachers had oriented their students to a new grade, sharing highlights of the upcoming school year. Teachers were enthusiastic about changes in the reading program--new novels, the initiation of silent sustained reading (SSR) time, and the computerized Accelerated Reader program. The initial survey administration corresponded with students' introduction to these activities.

Terminal objective 2 concerned the reading comprehension achievement of the 1991-1992 seventh graders identified as underachievers using the CTBS and TCS assessments of April 1990. The individual students' NCE scores from 1990-1993 are listed in Table 14. The originally identified 1991-1992 seventh grade underachievers represented a unique subgroup of the project in that these students, unlike their sixth and eighth grade counterparts, had not taken the TCS in April 1991. Their inclusion in this project was based on their anticipated reading comprehension achievement, predicted by the 1990 TCS scores. When the project began in September 1991, four of the seventh grade underachievers (702, 710, 711, 714) had actually met or exceeded their 1990 anticipated achievement on the 1991 CTBS reading comprehension subtest. Remarkably, these four students never again equalled their 1991 achievement in reading comprehension, but three of the students (702, 710, and 714) did meet objective 2 in 1993. Comparing the 1993 NCE scores with the 1990 ANCE scores, student 703 also met the objective. These four students comprised only 36% of the 11 originally identified seventh grade underachievers who remained in the district for the duration of the project. The other seven students, or 64%, did not meet their anticipated achievement as predicted by the 1990 test results. Ten of the 11 surviving students did show a positive gain in reading comprehension from 1990 to 1993. The mean gain for the seventh grade underachievers was 7.13 NCE points.

Using the more recent 1992 anticipated NCE scores to compare with the 1993 actual achievement scores in reading comprehension, student 704 could be included with students 702, 703, 710, and 714 in meeting objective 2, elevating the success rate to 45%. The six surviving students who never achieved their actual anticipated score did show a mean gain of 6.7 NCE points from 1990 to 1993. Although Table 14 does show 1993 test results for student

709, this student was not considered part of the surviving group. Student 709 left the district for over one year during the implementation of this project. Therefore, her scores were not considered in this outcome evaluation.

Table 14

Comparison of Seventh Grade Reading Achievement Using CTBS and TCS Scores, 1990-1993

Student #	Met Objective	1993 NCE	1992 ANCE	1992 NCE	1991 NCE	1990 ANCE	1990 NCE	Dif[a]
701	---	---	Moved	---	---	79.6	70.9	---
702	X	82.7	70.9	86.9	79.6	71.8	65.6	17.1
703	X	49.5	45.2	46.8	44.1	45.2	44.1	5.4
704		68.5	65.6	64.9	58.7	78.2	67.7	0.8
705		33.7	51.1	37.7	34.4	54.8	27.2	6.5
706		15.4	32.3	25.3	1.0	46.3	1.0	14.4
707	---	---	Moved	---	---	41.9	17.3	---
708		29.9	45.2	29.9	30.7	48.4	34.4	-4.5
709	---	33.7	Moved	---	51.1	51.6	47.9	---
710	X	55.3	54.2	62.3	64.2	55.3	41.3	14.0
711		46.8	50.0	35.1	48.4	48.4	46.3	0.5
712		33.7	41.3	20.4	25.3	46.3	24.2	9.5
713		43.0	52.1	40.7	39.0	55.3	29.9	13.1
714	X	70.9	62.9	72.8	84.6	70.1	69.3	1.6
Total difference between 1993 and 1990 NCE scores								78.4
Mean difference								7.13

Note. The April 1990 CTBS and TCS scores were used to identify the 1991-1992 seventh grade underachievers because the TCS is only administered every two years. NCE = Normal curve equivalent score on CTBS reading comprehension subtest. ANCE = Anticipated NCE score on CTBS reading comprehension subtest. [a]Dif = Difference between 1993 and 1990 NCE scores.

Of the three different grade levels involved in this project, the achievement for the originally identified seventh grade group was most disappointing. Coincidentally, this group of students was subjected to the greatest changes in staff. As eighth graders, these students encountered four different teachers in the two eighth grade teaching positions during 1992-1993. Three of these four staff members were new to eighth grade and two were new to the district. During the 1991-1992 school year, as seventh graders, these students were taught by two teachers who were veterans in the school district, but new to seventh grade. These remarks are offered as anecdotal information for the reader. They are not meant as an explanation or causal statement. However, such uncontrollable variables (spousal transfers and maternity leaves) do present the conditions which may bear on outcomes in the dynamic environment of a school or individual class.

The unusual degree of staff changes for the identified seventh grade students may have also influenced their attitudes toward reading. Terminal objective 5 sought an increase in positive attitude toward reading for the 1991-1992 identified seventh grade students. The mean increase was again expected to be at least 0.25 points from the initial September 1991 administration of the Estes Reading Survey to the May 1992 or January 1993 post administrations. Table 15 illustrates that the identified students actually showed a mean decrease of - 0.12 points on both the 1992 and 1993 post administrations.

In addition to the potential for upheaval caused by the noted personnel changes, other possible factors affecting the seventh grade students' attitudes may have been similar to the possibilities enumerated in the analysis of the sixth grade Estes Survey results (see Table 13). Various aspects of the testing environment, including the exact protocol followed during survey administration and differing feelings of students and teachers may have threatened the validity of the test results. Like their sixth grade counterparts, prior knowledge of the new computerized Accelerated Reader program and of other changes in the curriculum, may have inflated the seventh graders' scores on the 1991 pre-survey. As Kerby (1986) warned, such measurements used to assess attitude must be interpreted cautiously.

Table 15

Comparison of Seventh Grade Students' Estes Reading Survey Scores, 1991-1993

Student #	Mean Scores on Estes Survey			Dif[a]	Dif[b]
	1993	1992	1991		
701	---	---	Moved	---	---
702	3.33	4.00	2.20	1.13	1.80
703	3.20	3.53	3.47	-.27	.06
704	1.00	1.80	4.27	-3.27	-2.47
705	3.00	1.53	1.40	1.60	.13
706	3.07	2.47	2.33	.74	.14
707	---	---	Moved	---	---
708	3.47	3.20	2.73	.74	.47
709	2.67	Moved	2.80	-.13	---
710	4.07	2.87	4.67	-.60	-1.80
711	3.60	3.47	3.53	.07	.06
712	2.36	2.93	3.27	-.91	-.34
713	2.40	3.80	N/A	N/A	N/A
714	2.80	2.40	2.33	-.47	.07
Total difference between the Estes Scores				-1.37	-1.20
Mean difference				- .12	- .12

[a] Dif = Difference between the 1993 and 1991 Estes Survey results. [b] Dif = Difference between the 1992 and 1991 Estes Survey results.

In summary, of the six terminal objectives, only objective 6, designed to increase positive attitude toward reading for the eighth grade underachievers was successful as defined by the objective. However, the project did yield substantial increases in reading comprehension, as determined by the CTBS. As a result of the interventions, 38 of the 46 underachievers, or 82% who completed the project, improved their reading comprehension achievement on the CTBS with a mean increase of 8.36 NCE points. Further, 24 of these students, or 52%, actually met their original anticipated achievement as predicted on the TCS. Indeed, the increased reading activities created opportunities for the individuals identified in this project, as well as their peers.

These activities are discussed below as process objectives. A primary concern throughout this project was to increase reading for the identified underachievers. In fact, the process objectives were designed to provide students with increased opportunities to read. A review of the process objectives and the results follow.

Objective 1 called for a planned program of sustained silent reading and the use of the Accelerated Reader computerized program to facilitate opportunities to read independently. A minimum of ten self-selected fiction books would hopefully be read by each identified student during the 1991-1992 school year.

Objective 2 sought a 50% increase of fiction book circulation for students in Grades Six through Eight during 1992, as compared to the same period from March to May of the previous year.

Objective 3 encouraged the identified students to become members of the public library, upon parent approval.

Objective 4 provided the students with the opportunity for successful participation in reading books of their choice and verifying comprehension by using the Accelerated Reader program.

Objective 5 required all teachers to implement a sustained silent reading (SSR) program in their classrooms for a minimum of one hour per week.

Objective 6 introduced at least one new novel to the reading curriculum for Grades Six through Eight.

Objective 7 provided the identified students with a student-teacher-parent contract to encourage reading outside the school day.

Objective 8 established a "read aloud" program, offering select readers in Grades Six through Eight an opportunity to plan and present a reading selection to younger students.

Objectives 1 and 4 are closely related in that both strategies facilitated independent reading by prescribing a measurable outcome for each identified student. Namely, (a) students would increase their reading activity by reporting on a May 1992 survey a minimum of ten books read, and (b) students would earn points on the computerized Accelerated Reader program, verifying comprehension of self-selected novels. Tables 16-18 depict in tabular format the outcome of these strategies for the 1991-1992 identified sixth, seventh, and eighth grade students. Because the project was extended to encompass the 1993 CTBS test results for the originally identified sixth and seventh graders, tables 16 and 17 include the number of books reportedly read and the total Accelerated Reader point accumulation from September 1991 to February 1993 of the following school year. These two indicators of reading activity are depicted in relation to the students' gains in achievement and attitude (i.e. improved scores in reading comprehension and Estes survey results).

A perusal of Table 16 indicates all of the identified sixth grade students scored points on Accelerated Reader with a median score of 43 points. Fourteen of the sixth graders scored near or above the median, accumulating more than 40 points from September 1991 to February 1993. Of these 14 sixth graders, 9 students met their anticipated achievement in reading comprehension and 2 additional students demonstrated improved comprehension on the CTBS. In addition to the reading record maintained by the Accelerated Reader program, a student survey administered in May 1992 and February 1993 provided data on the number of books read by individuals. Of the 13 sixth grade students who reportedly read 10 or more books in either 1992 or 1993, seven students met their anticipated reading comprehension score and four other students demonstrated comprehension improvement. Of the five students who met the anticipated increase on the Estes Survey (≥ 0.25 point gain) for reading attitude, four had earned more than 40 Accelerated Reader points and two indicated they read 10 or more books.

Table 17 allows for similar analysis of the seventh graders' improvement in achievement and attitude in relation to the two indicators of their reading activity. Of the five seventh grade students who earned more than 40 Accelerated Reader points, four met their 1990 anticipated

Table 16

Reading Achievement and Attitude Improvement Compared to Some Indicators of Reading Activity for the 1991-1992 Identified Sixth Grade Underachievers

Student #	Improved 1993 NCE score[a]	Improved 1993 Estes score[b]	Read 10 or more books[c]		Total Points in Accelerated Reader[d]
			1992	1993	
601	++	N/A	?	X	29.8
602	✓		X		13.4
603	✓	++			47.3
604	++			N/A	42.4
605	++				32.6
606	++				38.3
607	Moved	---	---	---	---
608					29.4
609	+			X	34.8
610	✓		X	X	77.5
611	++		X	X	41.5
612	++	++	X	?	84.5
613	+	++			29.4
614	+✓	++	?	X	112.6
615	+		X		19.0
616	Moved	---	---	---	---
617	++	++	?		48.7
618	Moved	---	---	---	---
619	+				35.4
620	++		X	X	106.6
621	Moved	---	---	---	---
622	+			X	53.2
623	++				55.0
624	++	+	X	X	66.9
625					88.9
626	++		X		60.5
627	++	+		X	41.4

[a] A plus sign (+) indicates improvement in reading comprehension as measured by the NCE score from 1991 test results. A double-plus sign (++) indicates improvement met or exceeded anticipated score (ANCE). A check (✓) indicates student would have met anticipated score using 1993 TCS, as opposed to 1991 test results. [b] A plus sign (+) indicates improvement in attitude from 1991 Estes Survey results. A double-plus sign (++) indicates improvement was ≥ 0.25 points. [c] Responses taken from May 1992 and February 1993 surveys. A question mark (?) denotes student was unsure how many books were read. [d] Points accumulated from September 1991 to February 1993.

Table 17

Reading Achievement and Attitude Improvement Compared to Some Indicators of Reading Activity for the 1991-1992 Identified Seventh Grade Underachievers

Student #	Improved 1993 NCE score[a]	Improved 1993 Estes score[b]	Read 10 or more books[c]		Total Points in Accelerated Reader[d]
			1992	1993	
701	Moved	---	---	---	---
702	++	++	X	X	208.5
703	++		X	X	55.5
704	+✓		?		53.4
705	+	++		X	6.4
706	+	++			20.0
707	Moved	---	---	---	---
708		++		X	21.8
709	Moved	---	---	---	---
710	++		X	X	111.3
711	+	+	X	X	15.0
712	+		X	X	12.6
713	+	N/A	?	X	26.5
714	++			X	71.5

[a] A plus sign (+) indicates improvement in reading comprehension, as measured by the NCE score from 1990 test results. A double-plus sign (++) indicates improvement met or exceeded anticipated score (ANCE). A check (✓) indicates student would have met anticipated score using 1993 TCS, as opposed to 1990 test results. [b] A plus sign (+) indicates improvement in attitude from 1991 Estes Survey results. A double-plus sign (++) indicates improvement was ≥ 0.25 points. [c] Responses taken from May 1992 and February 1993 surveys. A question mark (?) denotes student was unsure how many books were read. [d] Points accumulated from September 1991 to February 1993.

reading comprehension score by 1993 and the fifth student (704) demonstrated improved reading comprehension. Indeed, student 704 would also have met his anticipated NCE score, using the more recent 1993 anticipated scores. Of the nine seventh graders who read 10 or more books in 1992 or 1993, four students met their 1990 anticipated reading comprehension score and four additional students demonstrated improvement in reading comprehension. Of the four students who met the anticipated improvement in reading attitude on the Estes Survey, three indicated they read 10 or more books, but only one had scored 40 or more points on Accelerated Reader.

Table 18 depicts such an analysis of the eighth grade students. Since the 1991-1992 identified eighth graders were involved in the project for only one year, their total point

Table 18

Reading Achievement and Attitude Improvement Compared to Some Indicators of Reading Activity for the 1991-1992 Identified Eighth Grade Underachievers

Student #	Improved 1992 NCE score[a]	Improved 1992 Estes score[b]	Read 10 or more books[c]	Total Points in Accelerated Reader[d]
801				64
802	+	++	X	30
803	++	+	X	15
804	Moved	---	---	---
805	++	++	X	19
806	++		X	57
807	++		?	0
808	++	++	?	6
809	++	+	X	27
810	++	++	?	3
811		++		29
812	+		X	7
813	++	+	X	37

[a] A plus sign (+) indicates improvement in reading comprehension, as measured by the NCE score from 1991 test results. A double-plus sign (++) indicates improvement met or exceeded anticipated score (ANCE). [b] A plus sign (+) indicates improvement in attitude from 1991 Estes Survey results. A double-plus sign (++) indicates improvement was ≥ 0.25 points. [c] Responses taken from May 1992 survey. A question mark (?) denotes student was unsure how many books were read. [d] Points accumulated from September 1991 to June 1992.

accumulation in Accelerated Reader would be understandably less than was earned by the sixth and seventh grade students. Six of the 12 students surviving the project scored near or above the median score with 20 or more points earned during the 1991-1992 school year. Table 18 illustrates that three of these six students met their 1991 anticipated reading comprehension scores, while another student demonstrated improvement in reading comprehension on the 1992 CTBS. Of the seven students who indicated they read 10 or more books during the 1991-1992 school year, five met their anticipated reading comprehension score and two additional students showed improvement in reading comprehension, as determined on the 1992 CTBS. Of the five students who met their anticipated score for reading attitude using the Estes Survey, two had earned more than 20 Accelerated Reader points and two had indicated they had read more than 10 books in 1992.

A relationship was sought between reading comprehension achievement, as determined by the CTBS, and independent reading activity as evidenced by student involvement in Accelerated Reader and the reported quantity of books read. Table 19 summarizes reading comprehension achievement by two indicators of reading activity. Specifically, 25 of the 46 identified students earned 40 or more Accelerated Reader points over two years (including six eighth graders who earned 20 points while involved in the project for one year). Of these 25 students, 20, or 80%, demonstrated improved reading comprehension on the CTBS. Sixteen of these students, or 64%, actually met their anticipated reading comprehension score, as determined by the test results originally used to identify the underachievers.

Table 19 also shows that 30 of the 46 identified students read 10 or more books annually, as reported on a 1992 and/or 1993 survey. Of these 30 students, 26, or 87%, improved their reading comprehension scores, and 16 of these students, or 53%, met their anticipated achievement.

The results indicated that increased reading activity had a positive relationship with improved reading comprehension, as depicted by those students who earned a substantial

Table 19

Number of Students by Grade Level Demonstrating Reading Achievement Compared to Some Indicators of Reading Activity

Grade	n[a]	Improved NCE score[b]	Met ANCE score[c]
	Students who earned 40 or more points on Accelerated Reader		
6	14	11	9
7	5	5	4
8[d]	6	4	3
Total	25	20	16
	Students who reportedly read 10 or more books		
6	13	11	7
7	9	8	4
8	8	7	5
Total	30	26	16

Note. Total number surviving project: Grade Six = 23, Grade Seven = 11, Grade Eight = 12. [a]*n* = number of students who met minimum standard for each reading frequency indicator. [b]NCE = Normal curve equivalent score on reading comprehension subtest of CTBS. [c]Anticipated NCE score taken from 1991 test results for Grade Six and Eight and 1990 results for Grade Seven. [d]Grade Eight data based on students who earned 20 or more points in one year.

number of points in the Accelerated Reader program and reportedly read 10 or more books annually. However, there was no clear association between increased reading activity and improved attitude toward reading. Only 14 of the identified students whose attitudes were assessed in 1991 met or exceeded the anticipated mean increase of 0.25 points in positive attitude by 1992 or 1993. Of these 14 students, only 7 had earned more than 40 Accelerated Reader points and 7 reportedly read 10 or more books in a year. As depicted in Table 20, increased reading activity is not indicative of improving attitude toward reading.

Process objective two indicated that fiction book circulation from the school library would be increased by 50% for students in Grades Six through Eight as a result of the increased reading activities. Circulation statistics were generated and compared between Spring 1991

Table 20

Number of Students by Grade Level Achieving Anticipated Improvement in Attitude Compared to Some Indicators of Reading Activity

Grade	n[a]	Reading frequency indicators: Scored 40 or more Accelerated Reader points	Reading frequency indicators: Read 10 or more books
6	5	4	2
7	4	1	3
8	5	2[b]	2
Total	14	7	7

Note. Total number surviving project: Grade Six = 23, Grade Seven = 11, Grade Eight = 12. [a]n = Number of students who met mean increase of 0.25 points on Estes Survey of reading attitudes. [b]Grade Eight data based on students who earned 20 or more Accelerated Reader points in one year.

and Spring 1992. Focus was on the circulation of fiction books which would most likely indicate self-selection of titles by students and hopefully be read cover-to-cover. Table 21 compares these data for the months of March through May during the 1991 and 1992 school years.

Table 21

Library Circulation Statistics (Number of Fiction Books Checked Out), March - May 1991-1992

Month/Year	Fiction books by grade			Total 6-8	Monthly increases from 1991 to 1992	
	8	7	6			
March 1991	10	12	19	41		
March 1992	77	20	158	255	214	622%
April 1991	7	42	13	62		
April 1992	53	7	97	157	95	253%
May 1991	9	23	6	38		
May 1992	49	27	85	161	123	424%
Total Increase from 1991 to 1992					432	406%

Clearly, an increase of 406% in fiction book circulation for the spring months of 1992 compared to the number of fiction books circulated during the same three-month period a year prior indicated increased reading activity by the upper grade students. Further, through discussions with the librarian during 1991-1992, more upper grade level students frequented the library than the staff recollected in prior years.

Process objective 3 intended to have all of the students in Grades Six through Eight become members of the free public library. To this end, a walking field trip to the public library was arranged. The head librarian met each identified class in the autumn of 1991 and provided each student an opportunity to join the library with parental approval, as was the library's policy. Each class also received an orientation to the facility by the librarian. With the exception of one individual in the originally targeted group of students, everyone else who was not previously a member did join the public library at the conclusion of the field trips. The one student who did not join was not permitted by his parent. In interviewing this student's teacher, it was discovered that his mother said she hated to read, her son did not like to read, and therefore, she saw no need to have her son join the library. Such an attitude underscores the idea that modeling may occur which can be either negative or positive.

The fourth process objective concerned the implementation of Accelerated Reader, a program designed to enable individuals to select from a wide range of books and to assess their comprehension of a book with instant feedback via a computerized testing management system. The librarian and classroom teachers oriented their students to this program at the beginning of the school year. The librarian indicated that Accelerated Reader generated considerable activity in the library, from selecting books to taking the Accelerated Reader tests. Recognition of student progress in Accelerated Reader ranged from bookmark prizes from the library to hallway visual displays honoring top scorers. The library was also the setting of pizza parties planned to reward students who earned more than 50 points during specific time intervals. During the course of the project, 31 of the identified students received one or more rewards for their progress in Accelerated Reader. Many other students who were rewarded for their progress were not part of the originally targeted group, but were participating in Accelerated Reader as a positive side effect of this project. In summary, this activity created an enthusiastic response among many of the upper grade students.

Process objective 5 required teachers to schedule time for sustained silent reading for students in Grades Three through Eight, for a minimum of one hour per week. The identified underachievers would naturally receive this SSR time, as well. This activity was easily planned and executed, beginning September 1991. Interestingly, many students expressed their enthusiasm for SSR time, expressing disappointment when the activity was cancelled due to unanticipated conflicts or schedule changes.

Process objective 6 enabled the teachers in Grades Six, Seven, and Eight to purchase new novels for classroom reading instruction. Although the objective specified at least one new novel be added to the reading curriculum at each grade level in 1991-1992, it was possible to add four novels at each level that year and supplement the 1992-1993 seventh and eighth grade reading curriculum with six additional titles. Such program expansion was successfully accomplished through the cooperation of teachers and administrators. Teachers' enthusiasm and interest in working with novels in the classroom justified the fiscal support necessary to expand the program.

Process objective 7 was the least successful of the activities planned to attain improved reading comprehension. Although this activity generated interest among lower grade students, the older students did not respond well to a student-teacher-parent contract that encouraged reading at home during the 1991-1992 school year. To promote greater participation and maintain better accountability of the identified students, this activity was repeated in 1992-1993 with the addition of monthly coupons to be signed by parent, teacher, and student upon completion of the required reading. The signed coupons were then redeemed for a cafeteria treat, such as an ice cream snack. Again, the older students failed to participate in this activity leading the manager to believe the treat was not sufficient to engage the older students' interest. Those students who did participate in the home contract were primarily in Grades Three, Four, and Five which demonstrated a positive side effect for these younger students.

The final process objective provided the underachieving students with the greatest discrepancy between anticipated reading comprehension achievement and actual reading comprehension achievement the opportunity to read aloud to younger students. This activity gave the students a purpose to read and required them to select and prepare material for their younger schoolmates. The manager met with the group as an orientation to the read-aloud program and read a picture book in order to model for these students. The guidance counselor was responsible for organizing the actual read-aloud schedule in the 1991-1992 school year. In the 1992-1993 school year, the librarian assumed this responsibility due to the loss of the vice principal which required the guidance counselor to assume additional administrative responsibilities. This activity was voluntary for the identified underachievers and, although they were encouraged, seven of the originally identified students dropped from the program during the course of their second year of participation as seventh and eighth graders. One 1991-1992 eighth grader left the program upon graduation. Three other identified underachievers and nine students outside the project eagerly volunteered to serve as read-aloud members. The teachers of the younger students expressed glee with this particular program. Many of the read-aloud students also indicated a personal satisfaction from reading to the younger students. The success of this activity was two-fold. First, a total of 13 identified underachievers participated in this program, earning appreciation from younger students. Second, several other students outside this project were also appreciated by the younger students. Finally, as a side effect, the younger students were the beneficiaries of this personal attention by the older students. This activity appeared to have remarkable potential for motivating older readers while providing a worthwhile service to the younger students. Table 22 depicts the underachieving students originally identified to participate in the read-aloud program. Most noteworthy was the improvement in reading comprehension. All 10 students demonstrated improvement on the CTBS reading comprehension subtest between the initial assessment and the 1993 test. Indeed, the mean increase for these students was 15.25 NCE points. Another interesting observation was the evidence of positive attitude toward reading. Five of the 10 participating students showed some gain in their Estes Survey results. Students in the read-aloud program completed a brief reaction survey after each reading. Seven of the 10 students exhibited positive responses regarding the program and three continued to react positively to their experiences into the 1992-1993 school year.

Table 22

Gains in Achievement and Attitude for Students Involved in the Read-Aloud Program

Student #	NCE Scores			Dif[b]	Estes survey gain[c]		Positive response to read-aloud	
	1991[a]	1992	1993		1992	1993	1992	1993
609	21.8	10.4	48.4	26.6			X	
613	55.3	59.9	70.1	14.8	+	+	X	X
615	33.7	45.2	39.6	5.9	+	+	X	
617	39.6	59.9	67.7	28.1			X	X
627	35.8	38.3	51.1	15.3		+	X	X
705	27.2	37.7	33.7	6.5	+	+	X	
706	1.0	25.3	15.4	14.4	+	+		
712	24.2	20.4	33.7	9.5				
713	29.9	40.7	43.0	13.1	N/A	N/A		
812	15.4	33.7	---	18.3		---	X	---
Mean increase from original NCE				15.25				

[a] Seventh grade scores (700 numbers) taken from results of 1990 CTBS. [b] Dif = Difference between original and final NCE scores. [c] A plus sign (+) denotes gain in positive attitude from original 1991 Estes survey.

Several of the strategies developed for this project triggered positive side effects for the students in the school district. First, the increase in library book circulation was impacted by the entire student population. The inference is clear that the students attending the school read more. This was further reinforced by involving all students in the silent sustained reading (SSR) program. Associated with the SSR activity was the perception of the collective school population focusing on reading independently. Teachers and students alike were taking important and finite class time to invest in an important instructional educational activity--reading.

As previously cited, the student-teacher-parent reading contract did not prove successful for the identified underachievers. However, for many of the younger students, this activity was enjoyed. It is hoped that as these students age, the habits they developed through this home reading program will continue, despite new-found interests which may compete for their time. Further, part of the contract agreement was the idea that parents would also model for students. It was hoped that this behavior occurred and may help stimulate good reading habits for the parents involved, and, in turn, all of their family members.

An increase in teacher dialogue occurred as the project unfolded. The librarian, the classroom teachers and the administrators discussed the various activities to increase reading, such as the new novels for instruction, Accelerated Reader, and the read-aloud program. The inference is that increased attention to reading and sharing between professionals will provide new and different insights in resolving educational concerns.

One negative side effect was the possibility of some reluctance to participate in Accelerated Reader as a result of the competitive nature of the program. This concern did not manifest itself. Indeed, some of the identified underachievers in reading excelled as high scorers in the total student population involved in Accelerated Reader. However, some other students did not avail themselves of the program as was hoped. In particular, two of the identified students, as 1992-1993 eighth graders, had not earned any points by January 1993. With the manager's intervention, they were prompted by a surprise reward to score at least 20 points by March 1993. The tangible enticement was enough incentive to motivate the previously reluctant readers and both students scored points, one achieving the pre-determined goal.

Many students outside the project participated in the Accelerated Reader program. Indeed, many students in the lower grades were anxious to participate in this activity. Some teachers also participated in Accelerated Reader. This was a very positive side effect for a number of reasons. First, the teachers served as wonderful role models for the students, reading books of their choice and enthusiastically approaching their computerized tests. Second, they developed a keen appreciation for young adult literature and for the Accelerated Reader assessment process. Finally, the participating teachers could easily recommend and/or discuss the novels with their students.

Reflections on the Solution Strategies

Improving reading comprehension for middle grade students who have been identified as underachievers is not a task which is easily accomplished. As the literature review demonstrated, students of this age, regardless of their academic achievement, are bombarded with competing interests at this time in their lives, especially in the social area. Reading as an activity of choice does not compete with other alternatives as students advance through the grades. This problem is further compounded for underachievers in reading who need to increase their reading activity to improve their comprehension ability. The strategies employed to improve reading comprehension achievement and attitudes toward reading for middle school underachievers focused on getting these students to read. It was thought that by increasing reading, the students would naturally improve their reading comprehension and, in turn, acquire a new or improved appreciation for reading. From this conception, the various strategies emerged.

Students appeared motivated to read the quality young adult novels that were selected by the teachers to become part of the reading curriculum. These high-interest books, varying in terms of subject, were discussed in reading classes. Supplementing this approach to increase reading via access to real books, Accelerated Reader, a computerized program, was a highly motivating tool to assess reading comprehension. This program allowed students to freely select books of their choice from approximately 1,000 titles. After reading independently at their own pace, students assessed their comprehension of the story using the computer. Successful assessments earned the students points and provided the teachers with information regarding the students' book selection and understanding of the material.

Both the novels in the classroom and the Accelerated Reader program encouraged students to read. To facilitate this activity, time was provided during the school week to read independently. A sustained silent reading (SSR) period was scheduled so that students had a minimum of one hour of such time per week. It was further suggested that students make reading a part of their home lives as well. To encourage this, students, teachers, and parents were asked to sign a contract requiring the students to read 15 minutes per day at home. The concept offered much potential for this project, but unfortunately, this activity missed the mark the most, mainly attracting the younger students, but virtually none of the students identified in this project. In retrospect, the manager should have followed this activity more closely, perhaps offering more enticing motivators for older students who participated in the home reading contract.

To encourage readers who may have had difficulty with grade level books and to provide these students with the incentive to read lower-level materials, a read-aloud program was established. It has been said to truly learn a subject, one should teach it. That was the purpose of this activity. The students involved in the read-aloud program were required to make selections and present the stories to younger students. Giving print material a voice required an understanding of the words. Both student readers and listeners seemed to enjoy this activity. The teachers of the younger students affirmed the success of this program.

Increasing the opportunities to select and read materials was the purpose of the walking field trip to the public library. After an orientation by the public librarian and a nearly 100% successful membership campaign, the public library became another resource for these students. Certainly, library usage increased for these students. Franklin Elementary School's library circulation statistics rose from the previous year. According to the public librarian, it appeared more students were using that library, although she could not specify the grade of these youngsters and was not permitted to share names of cardholders.

Throughout the project, the strategies changed very little. However, there were considerable changes with regard to personnel which most likely influenced these activities. To what extent this influence occurred is not known. For instance, during the 1991-1992 school year, four of the reading teachers of the identified students were either new to the grade level or replaced a teacher on leave. Further, at the end of the 1991-1992 school year, the vice principal position was eliminated due to budget cuts. This caused several changes in responsibilities for the guidance counselor which, in turn, caused changes in responsibility for the school librarian, related to the strategies of this project. In the 1992-1993 school year, changes of personnel continued. In September 1992, the principal left the district, requiring the hiring of a new principal. This new principal was previously a classroom teacher working with the identified students. This move facilitated the project in that the new principal had an understanding of many of the activities, however with the newness of the position and added responsibilities, the newly-hired administrator could not dedicate her time to this year-old project to the degree that the previous principal had been involved. Also noteworthy is the change of business administrators during this time period. Although not directly involved with the project, the transition of another new administrator to the district and the elimination of the vice principalship required the project manager, serving as school superintendent, to divert his attention away from this project more than he would have if all the players had remained constant. The teaching staff experienced more changes in the 1992-1993 school year, also.

Two eighth grade teachers left due to maternity and child-rearing leave. One seventh grade teacher left due to a reduction in force (RIF), and another teacher left when her husband was transferred after the year began. One other teacher missed the last quarter of the 1992-1993 school year due to medical reasons. The havoc personnel shifts can play in an organization must be taken into account. Certainly, the extent of changes in personnel at Franklin from 1991 to 1993 must have had some negative influence on the project outcomes.

Finally, the test scores and attitudinal survey results must be reviewed with some caution. As cited in Chapter 2, the correlation between anticipated achievement scores and actual achievement scores using the TCS and CTBS is considered statistically significant at the .20 level. Only 10 of the original students identified as underachievers in this project had discrepancies which were considered statistically significant. When examining the whole group of identified students, one must consider the possibility that the differences between anticipated and actual achievement in reading comprehension may be a statistical aberration. The manager, in attempting to create relationships, may have given more importance to the difference than was warranted.

The attitudinal component of this project may have been adversely affected by the inconsistency of the survey administrations. The pre-survey was administered in September 1991 when school was beginning and new reading materials and programs were being introduced. The post-surveys were administered in May 1992 and January 1993 when the newness of the program may have worn thin and seasonal differences or academic fatigue may have increased negative feelings in general. Between years, teacher changes may have also played a role in attitudinal differences of students. Regardless, future surveys should be administered by the same individual following exact protocol to attempt to provide as much consistency in the process as possible.

Implications of outcomes and processes

Certainly, the improved reading comprehension achievement scores of many of the identified underachievers were encouraging to the project manager and should be of interest to other educational administrators and teachers. The strategies employed at Franklin were relatively inexpensive and required minimal technical support. Through the efforts of dedicated teachers, staff, and volunteers, the library collection was coded for Accelerated Reader program efficiency, new computer hardware and software were purchased, high-interest novels were added to the curriculum, and time for sustained independent reading was added to the weekly teaching schedule. Reading at home was encouraged and awareness of the importance of reading was highlighted by the superintendent's school newspaper articles and by the teachers' modeling and pronouncements. Rewards were presented to students who accomplished reading feats, such as earned points on Accelerated Reader or validation of reading at home for the required time per month. This type of concerted effort can be easily duplicated in most schools throughout the state and nation. The only constraint that may be encountered would be the lack of enthusiasm by some teachers or librarians, given these strategies require both time and effort to employ. Accelerated Reader requires about $3,000 start-up costs for the hardware and software. Sustained silent reading requires that busy teachers direct their attention from the myriad of tasks to model for their students. Much like any successful program in any school, a teacher's enthusiasm and ability play a vital role in making these ideas work.

The premise that increased reading would result in increased success in reading comprehension, and, in turn, foster improved attitudes toward reading was not completely realized in this project. The attitudinal concern would be interesting to re-examine at another time, as described above, using a more consistent approach in data collection. For those who might wish to use this project as a springboard for their own endeavor, they are encouraged to monitor the attitudes of the identified students carefully and consistently. The writer was lulled into an exaggerated confidence when reviewing the 1991-1992 eighth grade students' results with regard to attitude. Perhaps, the only true indicator for improved attitude regarding reading is the behavior one exhibits when he/she has the freedom to chose an activity such as reading. Hopefully, improved ability to understand written material will enable individuals to make such a choice to read.

Chapter 7

Decisions on Future of Intervention

Maintain, Modify or Abandon

As reported throughout this project, the interventions to improve reading comprehension for the originally identified sixth, seventh, and eighth grade underachievers were available to all students in these grades. Many of the strategies yielded positive results and will be maintained in the instructional program. Specifically, sustained silent reading (SSR), Accelerated Reader, instruction with novels, and the read-aloud program will continue and may expand. The SSR program will continue for a minimum of one hour per week. The Accelerated Reader program will be expanded to include fourth grade students, and perhaps third graders. The concern regarding this program expansion centers on the need to purchase additional software and hardware and provide space for sufficient computer access. These financial and logistical concerns are presently being addressed. Reading instruction in the classroom will continue to be supplemented with novels. It is expected that new novels will be added to the upper grade reading curriculum. It is further expected that novels and trade books will supplement the reading curriculum in the lower grades. The read-aloud program will be maintained and expanded to include students who are exceptional readers. Primary level teachers will be invited to host the upper grade student readers in their classrooms.

Although the student-teacher-parent reading contract was not successful in the upper grades, it did produce interest and participation in Grades Two, Three, Four, and Five. This activity will be continued in the lower grades. If it is continued in Grades Six, Seven, and Eight, it is evident that an added incentive will need to be identified. Certainly, the cafeteria treats were not motivating enough for the older students to participate in the contract activity.

Perhaps, in addition to the monthly treat in the cafeteria, a monthly drawing should be held to reward a participating upper grade student with something more significant, such as a tee shirt.

Additional Applications

This project has the universality for improving reading comprehension in all school settings. It clearly focuses attention on the activity and importance of increased reading. Certainly, improved reading comprehension will positively affect other areas in the academic setting where understanding of the written word is important. The processes leading to the interventions used in this project are also applicable to advance sound educational practices, in general. Encouraging cooperation among teaching professionals, communicating clearly between key players, and allocating sufficient resources are necessary ingredients for any successful project. The writer is confident that the interventions applied in this project would be worthwhile in any curricular area, providing appropriate subject area materials were available for independent and teacher-structured study.

Dissemination of Information About Benefits

This project will be disseminated in several ways. The observers for this project are all superintendents in neighboring school districts. Two of the neighboring districts have inquired about the Accelerated Reader program. Indeed, Franklin's librarian has hosted several librarians for the purpose of demonstrating this program. The school district's Home School Association (HSA) has become involved in the reading program and has expressed interest in the form of financial support for the Accelerated Reader program and positive comments with regard to the reading contract and silent sustained reading (SSR) program. Finally, the manager is considering an article for publication regarding the benefits associated with this project. The manager has written some articles for the school's newspaper, highlighting the success of some of the interventions and stressing the importance of reading.

Recommendations

In reviewing this project, it is apparent that several interventions were successful and should continue. It is equally clear that some interventions did not succeed. Some of the strategies for data collection should be reconsidered or redesigned. Specifically, the pre- and post-assessments ascertaining student attitudes toward reading should be administered using a strict protocol. The pre-assessments should be given prior to any introduction of interventions. For example, knowledge of the Accelerated Reader program which generated an unusually high initial interest may have influenced student responses on the initial Estes Survey of reading attitude. Another recommendation would have students keep journals of the specific book titles they read throughout the project. This ongoing recordkeeping would provide the manager with exact data rather than an estimate of the number of books read by students according to a post-survey. It would also provide a listing of the books read which were not part of the Accelerated Reader program.

With regard to the read-aloud program, those students who were most inhibited or disinterested should be assisted or counseled in hope of keeping them in the program. For those identified underachievers, the writer recommends more individual contact. Although the role of superintendent and the use of delegation hinders such opportunities, the manager believed this contact might provide greater insight into the success of the interventions. A teacher mentor/advisor, or "reading buddy," might be assigned to meet with the identified underachiever in such a project as this. This relationship might be a more realistic way of increasing contact with the underachievers than a direct contact between superintendent and student.

Finally, the dilemma of whether or not to inform the identified students of their reading potential must be considered. In this project, these students were not informed of the discrepancy between their anticipated and actual achievement in reading comprehension. Sharing this information may provide some students with an incentive to improve. Conversely, such knowledge could result in an inflated opinion of ability, thwarting efforts to strengthen achievement. Further, consideration must be given to the possibility of creating a Hawthorne effect if the students became aware that they were part of a study. This question will need to be addressed by anyone wishing to undertake a similar project.

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Appendixes

Appendix A

District Goals
Reading 1991-1992

Objective:

Fifty (50) percent of fifth, sixth, and seventh graders (1990-1991) who scored below their anticipated Reading Comprehension scores on the CTBS will increase three percentile points in reading comprehension in sixth, seventh, and eighth grade respectively.

The following activities in our reading objective have been completed as of July 1992.

1. Reading Committee formed.
2. Committee developed a list of appropriate novels for grades 6 through 8
3. Library Card Campaign completed.
4. Accelerated Reader Program initiated.
5. Silent Sustained Reading (SSR) program introduced.
6. Read-Aloud Program by older student to younger students organized.
7. Reading Materials purchased.
8. Sixth through eighth grade staff in-serviced on Literature-Based Instruction.
9. CTBS Test administered and results analyzed.
10. Results reported to the Board of Education.

Appendix B
Anticipated and Actual Achievement on CTBS Main Test Batteries

Table B-1

1991-1992 Sixth Grade Student Data from 1991 CTBS Main Test Batteries

Student #	Test Battery							
	Total Reading		Total Language		Total Mathematics		Total Battery	
	NCE	ANCE	NCE	ANCE	NCE	ANCE	NCE	ANCE
601	61.7	54.8	64.2	58.7	64.2	63.5	64.9	61.0
602	42.5	45.2	51.1	43.6	50.5	42.5	47.9	44.1
603	82.7	89.6	64.9	81.1	73.7	82.7	75.8	86.9
604	50.5	55.3	54.8	58.7	64.2	63.5	57.0	61.0
605	39.0	48.4	52.1	45.2	44.7	45.2	45.2	46.3
606	40.1	47.9	50.0	45.2	55.9	44.1	48.4	46.3
607	44.1	58.7	34.4	53.2	55.9	56.4	43.6	57.0
608	40.1	49.5	59.9	48.4	46.3	49.5	48.9	49.5
609	27.2	52.6	28.2	51.6	44.7	52.1	31.5	52.6
610	44.1	52.6	47.9	53.2	55.3	56.4	48.9	55.9
611	48.4	61.0	58.7	64.9	53.2	67.7	53.2	67.7
612	39.6	39.0	51.1	43.0	70.9	43.6	52.6	42.5
613	58.7	93.3	70.1	89.6	99.0	89.6	78.2	93.3
614	93.5	89.6	75.8	79.6	74.7	77.0	84.6	84.6
615	43.0	52.1	27.2	53.2	44.7	53.2	37.1	54.2
616	42.5	48.9	44.7	50.5	32.3	52.1	39.6	51.1
617	44.7	64.2	54.8	61.0	55.3	62.9	51.6	64.2
618	52.1	60.4	62.9	57.0	72.8	59.9	63.5	60.4
619	43.0	46.8	61.0	46.8	70.1	49.5	57.5	48.4
620	45.8	51.1	52.6	52.1	33.7	53.7	43.6	52.6
621	39.6	43.6	48.4	45.2	46.8	45.2	44.7	45.2
622	75.8	71.8	75.8	77.0	79.6	77.0	79.6	78.2
623	37.1	38.3	37.7	41.3	41.3	41.3	37.7	41.3
624	53.2	84.6	93.3	82.7	84.6	82.7	78.2	86.9
625	67.7	89.6	68.5	84.6	82.7	84.6	75.8	89.6
626	62.9	66.3	46.3	67.7	56.4	70.9	54.8	70.9
627	41.9	47.4	34.4	47.9	45.2	48.4	40.1	48.4

Note. NCE = Actual achievement, as measured by normal curve equivalent score. ANCE = Anticipated achievement

Table B-2
1991-1992 Seventh Grade Student Data Utilizing 1990 CTBS Main Test Batteries

Student #	Test Battery							
	Total Reading		Total Language		Total Mathematics		Total Battery	
	NCE	ANCE	NCE	ANCE	NCE	ANCE	NCE	ANCE
701	69.3	86.9	79.6	70.9	67.7	70.9	74.7	77.0
702	64.9	74.7	71.8	69.3	86.9	67.7	75.8	71.8
703	41.9	45.8	45.8	44.1	41.9	43.6	43.0	44.7
704	58.7	82.7	53.2	71.8	32.3	72.8	47.9	77.0
705	29.9	55.3	32.3	58.7	36.5	62.9	32.3	61.0
706	10.4	45.8	15.4	45.2	38.3	46.8	17.3	46.3
707	24.2	40.7	10.4	41.3	26.3	40.7	18.9	41.3
708	37.1	48.4	41.9	47.9	39.0	49.5	39.6	49.5
709	52.1	53.2	56.4	50.0	53.2	51.1	54.2	52.1
710	47.9	58.1	57.0	54.8	39.6	54.8	48.4	56.4
711	39.0	49.5	29.1	46.3	29.1	47.4	31.5	48.4
712	23.0	45.8	31.5	46.3	39.6	46.8	30.7	46.8
713	33.7	55.9	37.7	59.9	32.3	61.0	34.4	61.0
714	72.8	73.7	93.3	62.9	49.5	63.5	74.7	67.7

Note. Since the Test of Cognitive Skills (TCS) is not administered in Grade 6, the 1991-1992 seventh grade scores were taken from the 1990 CTBS and TCS. NCE = Actual achievement. ANCE = Anticipated achievement.

Table B-3

1991-1992 Eighth Grade Student Data from 1991 CTBS Main Test Batteries

Student #	Test Battery							
	Total Reading		Total Language		Total Mathematics		Total Battery	
	NCE	ANCE	NCE	ANCE	NCE	ANCE	NCE	ANCE
801	46.3	40.1	29.9	37.1	41.3	37.1	39.0	39.0
802	36.5	45.2	54.2	44.1	53.2	44.7	47.9	44.7
803	67.0	72.8	65.6	73.7	68.5	81.1	68.5	78.2
804	52.6	56.4	47.4	56.4	56.4	58.7	52.1	57.0
805	51.1	59.9	60.4	61.0	74.7	67.0	62.9	63.5
806	65.6	64.2	68.5	62.3	73.7	64.9	70.9	64.9
807	65.6	74.7	74.7	73.7	84.6	77.0	75.8	77.0
808	47.9	39.0	40.1	35.1	26.3	35.8	37.7	37.1
809	41.9	39.0	51.1	39.6	51.6	45.2	48.4	41.3
810	43.6	55.9	45.2	54.8	57.0	59.3	48.9	57.0
811	41.3	63.5	46.3	63.5	44.1	67.7	44.1	66.3
812	23.0	48.9	35.1	48.9	67.0	53.2	39.6	50.5
813	40.7	47.4	54.8	45.2	38.3	45.8	44.7	46.3

Note. NCE = Actual achievement. ANCE = Anticipated achievement.

Appendix C

FRANKLIN ELEMENTARY SCHOOL

STUDENT READING SURVEY

Boy _____ Girl _____ Favorite Subject Area: ______________________________
(Check one)

Date: ____________________

(Circle one)

		NEVER	RARELY	SOMETIMES	OFTEN	ALWAYS
1.	At school, I like to read in my free time.	1	2	3	4	5
2.	I visit the school library for my own interest.	1	2	3	4	5
3.	When I visit the school library, I check out a fiction book.	1	2	3	4	5
4.	At home, I read for pleasure when I have the time.	1	2	3	4	5
5.	I see my parents reading for pleasure.	1	2	3	4	5
6.	I prefer watching T.V. to reading a book.	1	2	3	4	5
7.	The fiction books I've read are interesting.	1	2	3	4	5
8.	I visit the public library.	1	2	3	4	5
9.	When I start reading a book, I finish the whole thing.	1	2	3	4	5
10.	I like to talk with others about the things I read.	1	2	3	4	5

(Please turn this page over to answer a few short questions)

SHORT ANSWER SURVEY

1. What was the best book you ever read?

2. What grade were you in when you read the book?

3. Do you have a favorite author? _____ Yes _____ No

   If yes, who? ____

4. How many books have you read this past year? ____________________

5. Does your teacher read aloud to you? _____ Yes _____ No

   If yes, how often? Once a day _____ Once a week _____

   Once a month _____ Less often _____

Appendix D
Estes Survey Directions and Results

Directions to introduce the Estes Scale to Measure Attitude toward Reading:

"This is a scale to measure how you feel about reading. Read each statement and rate it on a scale from 1 to 5 as shown at the top of your sheet:

5 will mean "I strongly agree"
4 will mean "I agree"
3 will mean "I cannot decide"
2 will mean "I disagree"
1 will mean "I strongly disagree"

Please be as honest as possible in rating each statement. Your ratings will not affect your grade in any way.

(Please be sure all students have completed "Birthdate, Grade, and Date" information)

Table D-1

1991-1992 Sixth Grade Student Responses to 1991 Estes Reading Survey

Student #	Survey item score 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Average
601	(Unable to differentiate survey - no corresponding birthdate identifier was found in survey responses.)																
602	4	2	4	1	1	1	3	1	1	3	2	3	1	3	3	34	2.27
603	5	3	2	3	1	2	5	4	4	4	4	3	1	2	4	47	3.13
604	5	4	4	5	3	2	5	5	5	4	5	5	3	4	5	64	4.27
605	2	1	5	3	1	3	4	2	1	5	5	3	2	2	3	42	2.80
606	2	4	3	4	4	2	5	4	4	2	4	2	5	3	5	53	3.53
607									Moved								
608	3	1	3	3	2	2	5	4	5	3	3	4	1	2	4	45	3.00
609	5	3	5	4	3	4	5	4	3	5	4	3	5	3	5	61	4.07
610	2	4	4	5	3	1	3	3	4	3	5	2	3	-	5	47	3.36
611	1	2	4	5	2	2	5	3	4	5	5	2	4	3	5	52	3.47
612	5	4	-	-	2	1	4	1	1	4	5	4	2	5	2	40	3.08
613	5	2	4	4	3	4	4	3	5	5	4	4	3	3	4	57	3.80
614	4	3	3	2	3	2	1	2	2	1	1	2	2	2	1	31	2.07
615	4	4	4	4	3	2	3	2	3	2	2	4	4	2	4	47	3.13
616									Moved								
617	4	1	4	3	2	3	4	4	4	3	4	1	3	1	2	43	2.87
618									Moved								
619	4	4	4	4	3	2	4	2	4	2	4	4	3	4	5	53	3.53
620	1	4	5	5	5	5	5	5	5	5	5	2	5	2	5	64	4.27
621	2	1	4	3	1	2	4	2	1	5	-	2	1	3	3	34	2.43
622	4	3	2	4	3	4	4	4	5	5	5	4	4	4	5	60	4.00
623	3	4	2	2	5	4	3	4	3	2	2	4	3	2	1	44	2.93
624	4	5	4	5	3	4	4	2	5	4	3	3	5	4	5	60	4.00
625	4	4	4	4	4	3	2	5	4	5	4	4	5	4	4	60	4.00
626	5	3	5	4	1	5	4	3	4	5	5	3	2	5	3	57	3.80
627	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	1.00
Total	79	67	80	78	59	61	87	70	78	83	83	69	68	64	84	1,110	74.81
Average	3.43	2.91	3.63	3.54	2.57	2.6	3.78	3.04	3.39	3.61	3.77	3.00	2.96	2.90	3.65	48.26	3.25

Note. A dash (-) signifies item was not tabulated due to a multiple response or no response. Numerical value of negative items has been changed so that responses are all directionally positive.

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Table D-2

1991-1992 Seventh Grade Student Responses to 1991 Estes Reading Survey

	Survey item score																
Student #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Average
701	Moved																
702	2	2	2	2	3	3	2	2	2	2	2	2	2	3	2	33	2.20
703	4	4	4	4	3	3	3	3	4	4	4	2	4	3	3	52	3.47
704	4	5	5	5	4	5	5	5	4	4	4	3	5	1	5	64	4.27
705	3	1	1	1	1	1	1	1	1	1	1	5	1	1	1	21	1.40
706	3	1	3	1	1	3	4	1	1	1	1	4	5	2	4	35	2.33
707	Moved																
708	4	4	2	2	2	3	1	5	3	3	3	4	2	1	2	41	2.73
709	4	4	5	2	2	4	1	4	2	2	4	2	2	2	2	42	2.80
710	5	4	5	5	3	5	5	5	5	5	5	5	4	4	5	70	4.67
711	4	3	4	5	3	1	3	4	3	3	2	5	5	5	3	53	3.53
712	4	2	4	3	2	4	3	4	4	4	4	2	3	3	3	49	3.27
713	(No survey returned)																
714	4	3	2	2	1	2	3	1	2	2	3	4	2	2	2	35	2.33
Total	41	33	37	32	25	34	31	35	31	31	33	38	35	27	32	495	33
Average	3.73	3.00	3.00	3.09	2.27	3.09	3.18	2.82	3.18	2.82	3.00	2.55	3.18	2.45	3.09	45	2.96

Note. Responses to negative items have been changed so that responses are all directionally positive.

Table D-3

1991-1992 Eighth Grade Student Responses to 1991 Estes Reading Survey

Student #	Survey item score															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Average
801	5	5	5	5	3	3	5	1	4	5	4	5	4	3	4	61	4.07
802	1	1	1	1	1	3	1	2	2	1	1	1	2	1	1	20	1.33
803	4	5	2	3	2	4	5	4	5	4	4	4	3	4	5	58	3.87
804										Moved							
805	3	4	2	2	1	3	5	4	5	4	4	5	3	2	3	50	3.33
806	4	2	3	3	2	3	4	4	3	4	4	4	1	4	3	48	3.20
807	4	4	4	3	4	3	4	3	4	4	4	5	3	4	3	56	3.73
808	1	1	1	1	3	5	3	1	1	2	2	1	2	3	1	28	1.87
809	4	4	4	4	4	2	3	4	4	4	5	4	4	3	5	58	3.87
810	5	3	4	4	1	3	4	4	2	4	5	5	1	2	4	51	3.40
811	4	3	3	3	2	1	2	1	2	5	2	2	3	4	3	40	2.67
812	4	4	4	3	4	4	5	1	5	4	5	5	3	4	5	60	4.00
813	5	5	5	-	4	4	4	5	4	5	5	5	2	5	5	63	4.50
Total	44	41	38	32	31	38	45	34	41	46	45	46	31	38	42	593	39.84
Average	3.67	3.42	3.17	2.90	2.58	3.17	3.75	2.83	3.42	3.83	3.75	3.83	2.58	3.17	3.50	49.42	3.30

Note. A dash (-) signifies item was not tabulated due to a multiple response or no response. Responses to negative items have been changed so that responses are all directionally positive.

Table D-4

1991-1992 Sixth Grade Student Responses to May 1992 Estes Reading Survey

Student #	Survey item score															Total	Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
601	5	4	4	2	1	1	3	4	4	4	4	2	2	2	4	46	3.07
602	4	2	2	2	1	1	1	1	3	2	3	3	2	2	5	34	2.27
603	4	4	3	3	2	1	5	4	4	5	5	5	2	3	4	54	3.60
604	4	5	2	2	1	4	4	4	5	4	5	4	1	4	4	53	3.53
605	2	1	2	2	2	2	1	1	1	5	1	1	1	1	1	24	1.60
606	4	5	3	3	3	2	3	5	4	4	3	1	5	4	1	50	3.33
607									Moved								
608	2	4	4	3	3	3	4	3	4	3	4	3	2	3	3	48	3.20
609	3	4	4	2	1	4	4	2	4	3	3	-	3	-	3	40	3.08
610	4	4	4	3	3	1	4	3	4	4	4	4	3	4	3	52	3.47
611	4	5	5	5	3	3	5	4	5	5	5	4	4	4	5	66	4.40
612	5	5	5	5	4	3	5	4	4	5	4	4	4	4	4	65	4.33
613	5	3	4	4	2	5	4	5	5	4	4	4	3	2	4	58	3.87
614	4	3	3	4	3	4	4	3	4	4	4	4	3	3	4	54	3.60
615	2	1	4	2	1	1	1	3	5	2	2	4	1	1	4	34	2.27
616									Moved								
617	5	3	4	4	1	1	4	2	2	2	4	4	3	3	4	46	3.07
618									Moved								
619	4	4	4	5	3	4	4	4	4	4	5	4	4	2	4	59	3.93
620	1	1	1	1	1	1	1	1	1	1	1	1	5	1	1	19	1.27
621	4	3	1	3	3	3	5	4	2	4	4	1	4	3	2	46	3.07
622	4	2	2	3	2	3	3	2	3	2	4	3	2	3	2	40	2.67
623	3	5	2	3	1	1	3	2	3	1	1	2	3	1	2	33	2.20
624	5	4	4	5	3	4	5	3	5	5	4	3	5	4	5	64	4.27
625	4	4	4	4	4	3	5	4	4	5	4	5	5	5	5	65	4.33
626	5	3	4	4	3	2	1	1	1	4	4	4	3	4	3	46	3.07
627	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	1.00
Total	88	80	76	75	52	58	80	70	82	83	83	71	71	64	78	1111	
Average	3.67	3.33	3.17	3.13	2.17	2.42	3.33	2.9	3.42	3.46	3.46	3.09	2.96	2.78	3.25		

Note. A dash (-) signifies item was not tabulated due to a multiple response or no response. Numerical value of negative items has been changed so that responses are all directionally positive.

Table D-5
1991-1992 Seventh Grade Student Responses to May 1992 Estes Reading Survey

Student #	Survey item score																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Average
701										Moved							
702	5	3	4	4	3	2	5	5	4	5	4	4	4	3	4	60	4.00
703	4	4	4	4	4	4	3	2	2	4	4	4	4	2	4	53	3.53
704	3	2	1	2	2	2	1	2	2	1	2	3	1	1	2	27	1.80
705	2	1	2	2	1	1	2	1	1	3	2	2	1	1	1	23	1.53
706	3	2	2	3	1	2	3	1	2	3	3	5	3	2	2	37	2.47
707																	
708	4	1	3	2	2	3	5	4	4	4	2	5	4	1	4	48	3.20
709									Moved							0	0.00
710	4	1	4	3	2	2	4	1	3	4	4	5	1	2	3	43	2.87
711	4	4	4	4	3	3	3	2	2	4	4	5	3	2	5	52	3.47
712	2	3	4	3	-	4	3	1	3	2	4	3	3	3	3	41	2.93
713	5	3	4	3	3	3	3	2	4	4	5	5	4	4	5	57	3.80
714	4	3	3	2	2	3	2	1	2	3	5	3	2	1	3	36	2.40
Total	40	27	35	32	23	29	34	22	29	37	39	44	30	22	36	477	
Average	3.64	2.45	3.18	2.91	2.30	2.64	3.09	2.00	2.64	3.36	3.55	4.00	2.73	2.00	3.27		

Note. Numerical value of negative items has been changed so that responses are all directionally positive.

Table D-6

1991-1992 Eighth Grade Student Responses to May 1992 Estes Reading Survey

Student #	Survey item score																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Average
801	4	3	4	3	3	4	4	3	2	4	4	4	3	1	4	50	3.33
802	5	4	5	3	4	2	4	3	3	4	4	5	3	5	5	59	3.93
803	4	4	4	4	3	4	4	4	4	4	4	5	3	3	5	59	3.93
804									Moved								
805	5	5	5	5	5	5	5	5	4	5	5	5	5	3	5	72	4.80
806	4	1	2	3	2	3	4	4	3	3	4	5	2	3	3	46	3.07
807	4	4	4	3	2	3	4	3	3	2	4	5	4	3	3	51	3.40
808	3	5	2	2	3	1	3	5	3	1	5	4	1	1	2	41	2.73
809	5	4	4	4	3	3	4	4	4	4	5	5	4	4	4	61	4.07
810	5	4	4	5	1	4	4	5	5	4	5	4	3	3	5	61	4.07
811	4	2	4	4	2	3	2	4	2	4	4	2	2	4	4	47	3.13
812	5	2	4	4	3	1	3	5	2	4	5	2	4	2	4	50	3.33
813	5	4	4	4	3	5	4	4	5	5	5	4	4	4	5	65	4.33
Total	53	42	46	44	34	38	45	49	40	44	54	50	38	36	49	662	
Average	4.42	3.50	3.83	3.67	2.83	3.17	3.75	4.08	3.33	3.67	4.50	4.17	3.17	3.00	4.08		3.68

Note. Numerical value of negative items has been changed so that responses are all directionally positive.

Table D-7

1991-1992 Sixth Grade Student Responses to January 1993 Estes Reading Survey

	Survey item score															
Student	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Average
601	4	1	1	1	1	1	4	2	4	4	1	1	1	1	1	28	1.87
602	3	2	1	1	1	1	2	2	2	2	1	1	1	1	1	22	1.47
603	4	2	4	3	3	4	4	3	3	4	4	5	4	1	3	51	3.40
604	5	4	4	5	2	2	5	4	4	4	4	5	3	4	4	59	3.93
605	2	1	4	4	3	1	1	5	1	1	1	2	1	2	1	30	2.00
606	2	4	4	3	3	1	4	2	3	4	4	1	1	4	3	43	2.87
607										Moved							
608	3	2	2	3	2	3	3	3	4	3	4	3	2	4	2	43	2.87
609	1	4	2	1	1	1	3	3	1	1	4	3	1	1	1	28	2.15
610	2	2	3	3	1	1	3	3	3	3	3	4	3	3	2	39	2.60
611	4	4	4	4	3	3	4	4	4	4	4	4	4	3	4	57	3.80
612	5	4	5	5	4	3	5	2	3	5	4	5	1	4	4	59	3.93
613	4	4	5	5	1	4	4	4	4	5	4	5	4	5	5	63	4.20
614	5	4	4	5	3	4	5	4	5	5	5	5	4	5	5	68	4.53
615	2	1	3	2	5	5	3	4	2	1	2	5	4	1	3	43	2.87
616										Moved							
617	4	3	4	4	1	4	5	3	4	2	4	5	3	4	4	54	3.60
618										Moved							
619	1	4	4	4	3	4	4	4	4	4	4	3	4	2	4	53	3.53
620	5	1	1	1	1	1	1	5	1	1	1	1	1	1	1	23	1.53
621										Moved							
622	5	4	3	3	2	3	3	3	3	4	3	3	2	3	3	47	3.13
623	1	4	1	2	1	1	1	1	1	2	1	4	1	1	2	24	1.60
624	4	3	4	4	3	3	5	4	5	5	4	5	5	4	5	63	4.20
625	4	4	4	5	4	4	1	1	4	5	1	4	4	5	4	54	3.60
626	5	3	1	1	1	1	1	1	1	1	3	5	5	1	3	33	2.20
627	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16	1.07
Total	77	66	69	70	51	57	73	69	68	71	67	80	60	61	66	1,005	
Average	3.35	2.87	3.0	3.04	2.22	2.48	3.17	3.00	2.9	3.09	2.91	3.4	2.61	2.65	2.8	43.70	

Note. Numerical value of negative items has been changed so that responses are all directionally positive.

Table D-8
1991-1992 Seventh Grade Student Responses to January 1993 Estes Reading Survey

Student #	Survey item score																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total	Average
701									Moved								
702	3	2	3	4	2	3	4	2	4	3	4	4	4	4	4	50	3.33
703	4	3	2	3	3	4	2	3	2	4	4	4	4	2	4	48	3.20
704	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15	1.00
705	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	45	3.00
706	4	4	2	5	3	2	1	4	1	4	2	1	4	4	5	46	3.07
707									Moved								
708	4	2	4	4	3	3	3	4	4	4	4	5	3	1	4	52	3.47
709	4	2	4	2	2	2	2	2	4	2	4	2	2	2	4	40	2.67
710	5	3	4	5	3	5	3	2	5	4	5	5	4	3	5	61	4.07
711	4	3	4	4	2	3	2	3	4	4	5	5	4	3	4	54	3.60
712	2	4	2	2	3	2	2	1	1	2	2	1	3	3	3	33	2.36
713	3	5	4	1	3	3	4	1	1	4	1	3	1	1	1	36	2.40
714	3	2	3	3	2	3	3	2	3	3	4	4	3	2	2	42	2.80
Total	40	34	36	37	28	34	30	28	33	38	39	38	36	29	40		
Average	3.33	2.83	3.00	3.08	2.33	2.83	2.50	2.33	2.75	3.17	3.25	3.17	3.00	2.42	3.33		

Note. Numerical value of negative items has been changed so that responses are all directionally positive.

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Appendix E

Teacher Reading Survey Responses - May 1991

Survey items	Teacher responses to items					
	Never	Rarely	Sometimes	Often	Always	Total
My students ask to visit the school library.	0	0	3	3	2	8
I observe my students reading silently for pleasure in their free time.	1	1	5	1	0	8
My students are interested in checking out books when they visit the library.	0	1	3	4	0	8
I read aloud to my students.	0	1	5	0	2	8
I encourage my students to visit the public library.	0	0	3	4	1	8
I've heard my students discussing books they've read.	0	1	5	2	0	8
My daily plans include time for sustained silent reading.	2	1	2	3	0	8
I check out books from our school library for classroom use.	0	1	2	1	4	8
I require students to check out books from the library.	0	3	0	1	4	8
When my students start a library book, it seems they read it thoroughly and completely.	0	3	3	2	0	8

Appendix F

Student-Teacher-Parent Reading Contract

Year of the Lifetime Reader - 1991

READING CONTRACT

As part of Franklin Elementary School's effort to encourage all students to increase their reading time, we would like to initiate a contract involving the parents, the students, and the school. All parties will be involved in making this agreement a success.

As a parent/guardian, I will be responsible for the following conditions:

1. To insure that my child spends a minimum of 15 minutes a day in silent reading (105 minutes a week).
2. To provide a quiet place for my child to read.
3. If possible, read all the time, or whenever time permits, to model myself as a reader.
4. Discuss readings or articles with my child to encourage interest in reading.

I, the student, as part of my responsibility agree to:

1. Spend at home a minimum of 15 minutes a day in quiet sustained reading.
2. Periodically visit the school and/or town library to broaden my knowledge of materials available for reading.

I, the school teacher, as part of my obligation in this agreement will:

1. Continue to provide a sustained quiet reading time in school.
2. Monitor the reading achievement of the student
3. Provide resources and advice in selecting materials to be used in reading.
4. Promote independent reading by modeling and by encouraging book discussions.

Parent/Guardian Signature Date

Student Signature Date

Reading Teacher Signature Date

Appendix G

Read-Aloud Program Response Form

NAME: ____

CLASS: ____

TITLE OF BOOK OR EXERCISE: ______________________________

____

STUDENT RESPONSE: ____________________________________

____

____

PERSONAL COMMENTS: __________________________________

____

____